Nursing World

APRIL 1959

Nursing for a Growing Nation

SPECIAL OFFER FOR NURSES

New, therapeutically effective

pHoam cleanse pac°

(Incidentally, pronounced "foam")

for better skin hygiene

"A more rapid improvement in skin tone, appearance and healing rate was achieved in 84.4% of the patients."

Kice, Janith S.:
Clin. Med. *V*:1213, Sept. 1958

pHoam **cleanse pac** is a soapless cake, contained in a long-lasting, sponge-like applicator that cleanses and stimulates the skin without irritating. It eliminates blackheads and oily plugs, promotes healing of pimples. Cumulatively antiseptic and deodorant.

YELLOW cakes and applicator are highly effective in acne, seborrhea and excessive oiliness—medicated with sulfur, salicylic acid and bithionol U.S.P.

PINK cakes and applicator give new tone and vitality to youthful and aging skin—are helpful in dry and scaly conditions.

SAVE $1.00 Send only $1.25

To: DOAK PHARMACAL CO., INC., c/o Nursing World
480 Lexington Ave., New York 17, N.Y.
Enclosed $1.25

Name _____

Address _____

City _____ Zone _____ State _____

Please send me the ☐ Yellow ☐ Pink

pHoam **cleanse pac**

DOAK

DOAK PHARMACAL CO., INC.
NEW YORK 17, N.Y.

Subscribe to Nursing *World* in Groups

Form a Group, SAVE Up to $1.00 each

Regular subscription prices are $3.50 for 1 yr. in U. S. A.

The larger the group the bigger the savings. Present Nursing World subscribers may participate in or form a group with colleagues and other nurses. Still active subscriptions are automatically extended one year.

★ Start a Group—or join a Group today! Not only will each subscriber save—as much as 40% of our regular subscription price where groups of 6 or more are formed—but in addition, every subscriber will find the investment justified because of the fine, timely and exclusive articles which will appear in future issues.

Money Order, Postal Note or Check for all subscribers must accompany Group Orders to obtain the special money-saving low rate.

(The coupon below can be used for from 1 to 6 subscription orders. Use it today!)

NURSING WORLD
480 Lexington Ave., New York 17, N. Y.

Please enter 1-year subscription orders for the names given below. Our remittance is enclosed.

NOTE: If you do not wish to tear this order blank out, just print or type the information on a single sheet of paper, following the style given. Each subscriber's occupation must be clearly described.

	U.S.A. & Canada
☐ One 1-year subscription	$3.50
☐ Two 1-year subscriptions, each	3.25
☐ Three 1-year subscriptions, "	3.00
☐ Four 1-year subscriptions, "	2.75
☐ Five 1-year subscriptions, "	2.65
☐ Six 1-year subscriptions, "	2.50

Foreign add $1.00 per subscription for postage.

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Name .....
Address .....
.....
Branch of Nursing .....
.....
State whether a New Subscriber ☐ or Renewal Order ☐

Nursing World

THE OLDEST NURSING JOURNAL IN AMERICA—FORMERLY TRAINED NURSE & HOSPITAL REVIEW—FOUNDED IN 1888

Publisher
NICHOLAS MARTINI

Editor
VIRGINIA A. TURNER, R.N.

Managing Editor
MARIE G. EGAN

Associate Editor
JULIE E. MIALE, R.N.

Contributing Editors
ERICA J. KOEHLER, R.N.
Editor, Industrial Nursing
ANNIE LAURIE CRAWFORD, R.N.
Editor, Practical Nursing
LILLIAN E. KUSTER, L.P.N.
Assoc. Editor, Practical Nursing
ELSIE BANDMAN, R.N.
Consultant, Practical Nursing

Circulation Manager
KATHRYN A. WILEY

Production Manager
ARNOLD KRUPIN

Advertising Manager
CHRISTINE PERKINS
480 Lexington Avenue
New York 17, N.Y.
YUkon 6-5120

NURSING WORLD is published monthly by NURSING WORLD, 480 Lexington Avenue, New York 17, N.Y. Telephone: YUkon 6-5120. Second-class postage paid at Boston, Mass. Distribution office, 51 Melcher St., Boston 10, Mass.

Copyright © 1959 by NURSING WORLD under the International Copyright Convention. All rights reserved under Pan American Convention. Reproduction or use, without permission in writing, of any editorial or pictorial matter, in any manner, is prohibited. Printed in U.S.A.

Subscription rates: United States and Canada —1 year, $3.50; 2 years, $6.00; 3 years, $9.00; 35 cents per copy. Pan American and all other foreign countries, add $1.00 per year.

Vol. 133 APRIL 1959 No. 4

ARTICLES

Preview of National League for Nursing Convention 9

Three-Dimensional Problem
Agnes Gelinas, R.N., A.M. 10

Nursing from Angoon to Kake
Gertrude Sipple, R.N., B.S. 12

Poster Project
Louise Wiedmer, R.N., M.S. 14

The Special Duty Dilemma
Thomas P. Weil 16

Classes for Expectant Parents: Part 2
Betty Gregory Greenburg, R.N., M.S. 22

A Little White Book
Freida L. Mitchell, R.N. 29

DEPARTMENTS

In This Issue 5

NURSING WORLD Reports 6

What They're Saying
Shirley Hope Alperin, R.N. 8

INTERVIEW: What Is Radiation Medicine?
Julie E. Miale, R.N. 18

Advances and Trends in Drug Therapy
Joan Sarvajic, R.N. 25

Let's Talk It Over
Theresa G. Muller, R.N. 30

NOTICE TO SUBSCRIBERS
Address all new subscriptions and change of address to NURSING WORLD, 480 Lexington Avenue, New York 17 N.Y. 45 days notice is reuired. Whenq ordering a change, please furnish an address imprint from a recent issue. Change cannot be made without the old as well as the new address, including postal zone number, if you have one.

IN THIS ISSUE

COVER: During the week of May 11 nurses from all over the United States will focus their attention on the 1959 National League for Nursing Convention in Philadelphia, Pa., as illustrated by this month's cover.

Agnes Gelinas

Agnes Gelinas, R.N., A.M., chairman of the Department of Nursing of Skidmore College, New York City, and author of "Three-Dimensional Problem" (page 10), leads an active nursing life. She is the author of *Nursing and Nursing Education*, published in 1946 by the Commonwealth Fund, and has written several articles on nursing for professional journals. Miss Gelinas is prominent in many nursing and educational organizations, including the A.N.A., American Association of University Professors, and the N.L.N.; in the latter she is chairman of the Committee on the Cost Study in Nursing Education.

Her experiences as an itinerant public health nurse in Alaska are described by Gertrude Sipple in "Nursing from Angoon to Kake" (page 12). Miss Sipple received her R.N. and B.S. from the University of California Hospital, San Francisco. After three years in Angoon and Kake, Miss Sipple spent three years in the Barrow area. She is now regional nursing administrator for Southeast Alaska for the Alaska Department of Health.

Louise Wiedmer

Louise Wiedmer, R.N., M.S., found that her students in the Fundamentals of Nursing course at the Medical College of Virginia School of Nursing, Richmond, Va., actually enjoyed their "Poster Project." On page 14 she describes some of the posters submitted and how the term project is conducted. Miss Wiedmer holds a B.S. in Public Health Nursing and an M.S. in Nursing Education. At present, in addition to the Fundamentals of Nursing course, Miss Wiedmer teaches Orientation to Nursing and the first part of the Senior Conference; she also assists in teaching Medical and Surgical Nursing.

While on the administrative staff of Mount Sinai Hospital in New York City, Thomas P. Weil became interested in "The Special Duty Dilemma" (page 16). A graduate of Union College, Schenectady, N.Y., and Yale University's course in Hospital Administration, Mr. Weil is now studying for his Ph.D. in Public Health Economics at the University of Michigan.

Betty Greenburg

In "Classes for Expectant Parents: Part 2" (page 22), Betty Gregory Greenburg, R.N., M.S., reports on a meeting of the mothers' and fathers' group. Before moving to California last summer, Mrs. Greenburg had been an instructor of obstetric nursing at Incarnate Word College, San Antonio, Texas. Her previous positions included instructor in clinical nursing at the University of California, San Francisco; and, for eight years, instructor in obstetric nursing, gynecologic nursing, and pharmacology at St. Vincent's Hospital, Los Angeles, Calif.

Freida Mitchell

Since childhood, Freida Mitchell, R.N., author of "A Little White Book" (page 29), has had two ambitions: to be a nurse and to write. Some poems she wrote as a child (and which she describes as "atrocious") were published, but Mrs. Mitchell did not study journalism in college for financial reasons. She was, however, able to undergo nurse's training at her county hospital. Now, after many years in nursing, Mrs. Mitchell has become "reinfected with the writing bug" and has started seriously studying writing. She is now a psychiatric charge nurse at Patton State Hospital, San Bernardino, Calif.

EDITORIAL BOARD

NURSING EDUCATION

Lulu Wolf Hassenplug, R.N., *Dean, University of California School of Nursing.*

Henrietta Loughran, R.N., *Dean, University of Colorado School of Nursing.*

Elsie Palmer, R.N., *Ass't Director, Nursing Education and Nursing Service, City of New York, Dep't of Hospitals.*

NURSING SERVICE

Catherine M. Loeffler, R.N., *Assoc. Director, Johns Hopkins Hospital School of Nursing.*

Harriet M. Smith, R.N., *Ass't Professor, University of Washington School of Nursing.*

CLINICAL NURSING

Trude Aufhauser, R.N., *Assistant Professor of Nursing, College of Nursing, University of New Mexico.*

Kathleen Black, R.N., *Consultant Psychiatric Nursing, NLN, New York City.*

Margaret Blee, R.N., *Assoc. Professor Public Health, University of North Carolina.*

Lillian Sholtis Brunner, R.N., *Consultant in Medical and Surgical Nursing, Bryn Mawr Hospital, Pa.*

Annie Laurie Crawford, R.N., *Psychiatric Nursing Consultant, Florida State Board of Health, Jacksonville, Fla.*

Lena Dixon Dietz, R.N., *Clinical Instructor, Medical and Surgical Nursing, Michael Reese Hospital, Chicago.*

Anna V. Matz, R.N., *Public Health Nursing Consultant, New York City Department of Health.*

Theresa G. Muller, R.N., *Educational Director of Graduate Studies in Psychiatric Nursing, Univ. of Nebraska.*

Mary Mesecher, R.N., *Exec. Secretary, 3rd District, Minnesota Nurses Association.*

Donald E. Porter, R.N., *Executive Director, Alameda (Calif.) County Heart Assn.*

Dorothy W. Rostetter, R.N., *Vice-Chairman Private Duty Section, District No. 13, N. Y.*

INDUSTRIAL NURSING

Catherine R. Dempsey, R.N., *Head Nurse Medical Department, Simplex Wire & Cable Co., Cambridge, Mass.*

Mildred Dunn Thomas, R.N., *Supervisor, Nursing Service, Merck & Co., Rahway, N. J.*

Hazel H. Leedke, R.N., *Supervising Nurse, Thilmany Pulp and Paper Corp., Kaukauna, Wis.*

Joanna M. Johnson, R.N., *Director, Green Bay Visiting Nurse Ass'n., Green Bay, Wisconsin.*

Marion S. Mayne, R.N., *Consultant, Ind. Hygiene Division, Los Angeles County Health Department, Calif.*

O. F. Shook, M.D., *Medical Director, Owens Illinois Glass Co., Toledo, Ohio.*

Mildred I. Walker, R.N., *Sr. Consultant, Ind. Health Div., Dept. of National Health, Canada.*

PRACTICAL NURSING

Elisabeth C. Phillips, R.N., *Exec. Director, Visiting Nurses' Ass'n., Rochester, N. Y., Chairman.*

Margaret Baird.

Edwina G. Barnett, *Director, Colored Nurses Ass'n. of Virginia.*

Fern A. Goulding, R.N., *Director, Indianapolis, Ind. School of Practical Nursing.*

Madeline G. Kalin, *Second Vice-President of the NFLPN.*

Lula A. Snow, *Licensed Practical Nurse.*

Jean E. Sutherland, R.N., *Nursing Consultant, Counseling and Placement, New York State Employment Service.*

Ella M. Thompson, R.N., *Assoc. Exec. Dir., National Ass'n. for Practical Nurse Education.*

Amy Vigilione, R.N., *Assoc. Dir., Nursing Service, Kellogg Foundation, Battle Creek, Michigan.*

Arthur B. Wrigley, *State Supervisor, Trade and Ind. Education, Dept. of Education, N. J.*

NURSING WORLD

REPORTS

NAPNE Convention

"Nurses in a Changing World" will be the topic of the keynote address by Congressman Walter Judd of Minnesota at the opening session of the 18th Annual Convention of the National Association for Practical Nurse Education. The convention is to be held April 27 to May 1 at the Netherland Hilton Hotel in Cincinnati, Ohio.

On April 28 Dr. Max Goodson, dean of the College of Education of Boston University, Boston, Mass., will discuss "Social Outlook and Job Satisfaction—Ingredients of Effective Service."

It is expected that approximately 1,500 leaders of practical nursing from all over the United States will participate in the convention.

Tribute to Mary M. Roberts

For her greatness—there is no single theme—
Her writings are classics of the past, the present and future—
Her sayings a treasured inspiration for the living and the generations ahead.
This lady, whose life was passionately shared by young and old alike
Will stand in history among the Immortal!
For Mary Roberts, life had no sunset—no concluding chapter or final phrase—
Only bright horizons of hope with Eternal Spring.

MILDRED I. CLARK
Lt. Colonel, A. N. C.

Postgraduate Course

The Chicago Committee on Trauma of the American College of Surgeons will conduct its Third Annual Postgraduate Course in Fractures and Other Trauma in Chicago April 15-18, at the John B. Murphy Memorial Auditorium.

During the course all phases of trauma will be discussed, and illustrated lectures, audio-visual presentations, patient demonstrations, and question-and-answer periods will be held.

This year the postgraduate course will be dedicated to the memory of Dr. Fremont A. Chandler, former professor and head of the Department of Orthopaedic Surgery of the University of Illinois and former chairman of the Chicago Committee on Trauma.

Registration for the course is $75, but residents, interns, and students may attend the meetings at no cost, upon presentation of a note of indentification from the chief of service or dean. Further information is available from John J. Fahey, M.D., Chairman, Committee on Postgraduate Course on Fractures and Other Trauma, 1791 W. Howard St., Chicago 26, Ill.

Nursing Workshops

The Division of Nursing Education of Indiana University, Bloomington, Ind., will conduct four workshops in nursing this summer.

The Changing Role of the Nurse in Maternity Nursing will be the subject of the first workshop, to be held the week of June 1. The one-credit course will be directed by Vera Keane and the Division of Nursing Education faculty.

Mrs. Margaret Koehler and Mr. Lee D. Fuller will direct the Psychiatric Nursing workshop between June 15 and June 27. There will be supervised clinical experience provided at Central State Hospital, Indianapolis, during this course, which carries two credits.

The week of June 22 Jean Schweer will direct a workshop on Cardiovascular Nursing, offered in co-operation with the Indiana Heart Foundation. This is a one-credit course.

The final workshop will concern Implications of Communications for Improving Nursing Care, and will be directed by Helen Weber. Carrying one credit, it will be held the week of July 27.

For additional information contact Workshops, Division of Nursing Education, Rogers B, Indiana University, Bloomington, Ind.

"Never Alone"

In "Never Alone," a 45-minute, black-and-white documentary motion picture, the American Cancer Society presents the story of how Americans from all walks of life have been mobilized into a common struggle against cancer.

The film, available on a free-loan basis to organizations and institutions, can be obtained from any of the Cancer Society's 60 divisions and 3,000 units. It details the society's program and the work of its two million volunteers, and shows the laboratories where research scientists are seeking the causes and cures of cancer. A view is also given into the lives of some of the 800,000 people who have been cured of the disease.

Commend Maryland Nurse

Mrs. D. Delmas Caples was recently presented with a silver bowl in recognition of her work in organizing 73 Future Nurses Clubs in Maryland. This state is now reported to be the first to have the organization on a state-wide basis. Every Future Nurses Club of Maryland receives its charter from the Maryland League for Nursing.

N.L.N. Tests

The National League for Nursing has developed a new performance evaluation for psychiatric aides and a revised preadmission test for applicants to schools of practical nursing. These tests are provided by the N.L.N. for employing agencies and nursing schools, together with a scoring and reporting service for test purchasers.

A test in elementary psychiatric nursing and one in basic nursing procedures and elementary nutrition are included in the achievement tests for psychiatric aides and attendants. The test service is available to hospitals employing psychiatric aides and attendants, and is the N.L.N.'s first test for employed nursing personnel. The cost of the test service is 75 cents per person for the elementary psychiatric nursing test, $1 per person for the basic nursing procedures and elementary nutrition test. The latter test provides a score in each of the two areas, as well as a total score.

For further information about the tests, contact the Evaluation Service, National League for Nursing, 2 Park Ave., New York 16, N.Y.

Anniversaries

The School of Nursing of the University of Minnesota and the Division of Nursing Education of Teachers College, Columbia University, have announced plans for celebrating their respective 50th and 60th anniversaries.

The 50th anniversary program of the University of Minnesota School of Nursing will be held the week of May 4 and will include daily educational sessions on the theme "The University's

Contribution to the Education of the Nurse," tours of the Medical Center and the Twin Cities, and a dramatic presentation of nursing. A garden party, banquet, and musical program are also planned. During the musical program, a symphonic selection composed for the occasion will be introduced.

The two-day 60th anniversary celebration of the Division of Nursing Education of Teachers College will also commemorate the 100th anniversary of the birth of M. Adelaide Nutting, American nursing pioneer who was instructor for the first class of graduate nurses enrolled at the college in the fall of 1899.

Guests from all over the country are expected to attend the Division of Nursing Education's celebration, which will open with an anniversary dinner May 15 at the Hotel Pierre in New York City. Agnes Gelinas, chairman of the Department of Nursing at Skidmore College and president of the Alumni Association of the Division of Nursing Education of Teachers College, will preside at the dinner.

On May 16 an educational conference will be held at the college. During the morning session Prof. Virginia Dunbar, dean emeritus of the Cornell University-New York Hospital School of Nursing, will pay tribute to Miss Nutting in the address "A Look at Nursing Education During the Past 60 Years." In the afternoon Dr. Helen Nahm, dean of the School of Nursing of the University of California at San Francisco, will speak on "A Look at the Future of Education for Nursing." Following Dr. Nahm's address there will be a panel discussion on the future of nursing education at Teachers College.

Dr. Eugenia K. Spalding, professor of nursing education at the college, is general chairman of the celebration.

Announcements

The Illinois Nursing Home Association has announced that it will hold its Ninth Annual State Convention April 15-17, 1959 at the Orlando Hotel in Decatur, Ill. The theme of the convention is "Public Relations."

In New York City the Greater New York Association of Industrial Nurses, Inc., and the Greater New York Safety Council will co-sponsor their annual Safety Conference at the Hotel Statler the week of April 13.

"The Minor Orthopedic Problems as Seen in the Industrial Medical Clinics" will be the topic of the conference's industrial nursing program on April 15, at which time the clinical management and preventive aspects of these problems will be discussed. Moderator of the program will be Anne Ference, president of the Greater New York Association of Industrial Nurses, Inc., and assistant executive director of the national association. Pauline Wohlrath, chief nurse of The Port of New York Authority, New York City, is in charge of arrangements for the program.

During the program for industrial nurses there will be a demonstration on "The Why of How in Strain Prevention" by Eugene Schwarz, senior safety representative of the New York State Insurance Fund.

Commend Study Group Findings

The New York State Nurses Association and the New York State League for Nursing recently commended the action of the Board of Regents of New York State in initiating and conducting a study of nursing resources in New York State.

In a statement sent to Regent Dominick F. Maurillo, chairman of the Nurse Resources Study Group, with the request that it be included in the "Final Report on Needs and Facilities in Professional Nursing Education in New York State," the boards of directors of the NYSNA and NYSLN declared that they "believe that the report of the Nurse Resources Study Group represents an important, accurate and timely analysis of the nursing needs of our society in the immediate and foreseeable future."

The boards of directors went on to say that the support of one type of basic nursing educational program to the exclusion of other approved programs is not in the interests of the public nor the consumer of nursing service, and they therefore "deplore any efforts to stifle the development of the several patterns of nurse education, each of which has a proper place and purpose." They pointed out that any program of nursing that does not remain active will soon cease to serve the purpose for which it was developed.

A.R.C. To Help Train Aides

Authorized Red Cross nursing instructors will assist in training nursing aides in nursing homes as a result of a recent agreement reached by the United States Public Health Service, the American National Red Cross, and the American Nursing Home Association. The instruction will be carried out through the Red Cross Home Nursing Program.

As a result of this co-operative program, it is expected that public, private, and nonprofit nursing homes will be aided in providing better nursing care for their patients and that the training of nursing aides in nursing homes will be greatly expanded.

At present there are an estimated 25,000 public, private, and nonprofit nursing and domiciliary homes in the United States, with a bed capacity of 450,000 patients.

Nurses Commissioned

Capt. Patricia D. Shea was recently recommissioned in the Army Nurse Corps during ceremonies at First Army Headquarters, Governors Island, N. Y. At the same time Alexander Levy was sworn in as a second lieutenant.

Captain Shea served previously as second lieutenant in the A.N.C. from 1945-46 and from 1948 to 1956; she was promoted to captain in 1952. Captain Shea will start her third tour of duty at the U.S. Army Hospital, Fort Sill, Oklahoma.

Lieut. Levy served with the Air Force between 1950 and January 1954; he graduated from Bellevue Hospital School of Nursing in 1957. Following a six-week orientation course at Brooke Army Medical Center, Fort Sam Houston, Texas, Lieut. Levy will report for duty to the U.S. Army Hospital, Fort Leonard Wood, Mo.

Childbirth Safety

The maternal mortality rate in the United States has dropped 93 per cent in the last four decades, according to a report by the Health Information Foundation published in its statistical bulletin, *Progress in Health Services*. Whereas there were 61 maternal deaths per 10,000 live births in 1915, there were only 4.3 in 1957.

The Foundation states that much of the improvement in childbirth safety "is attributable to the high level of prenatal care and hospitalization for birth now customary in this country." The safest years for child-bearing, the Foundation reports, are the early twenties: There are only 3.2 maternal deaths for every 10,000 live babies born to women in the 20-24-year-old group.

Office Nurse Survey Report

The American Nurses' Association Research and Statistics Unit recently released a report on the survey of nurses employed in doctors' and dentists' offices. The report, which revealed that these nurses earned a median salary of $300 a month in June 1958, also contains more complete information about the salaries, hours, and other employment conditions of office nurses. Copies of the report are available upon request.

In the near future a report will be released on the results of a survey conducted among deans and directors of educational programs in nursing to determine the salaries and other employment conditions of the nurse faculty members of their schools.

what they're saying

by SHIRLEY HOPE ALPERIN, R.N.

ARTICLES critical of the professional conduct of doctors and nurses seem to be popular these days in national magazines. The latest journalistic bombshell is a highly explosive report on hospitals which appeared in the Feb. 3, 1959, issue of *Look* magazine. The article, authored by *Look's* medical editor, Roland H. Berg, reveals the results of an official medical survey conducted by the California Medical Association. According to Mr. Berg's interpretation of the survey's findings, "a hospital is not a fit place in which to be sick."

The report stated that hospitals were not functioning for the benefit of the patient but rather for the convenience of nurses and physicians. The inference was that daily schedules were organized to accommodate the routine of the medical staff, rather than to satisfy the patient's needs. When an investigator queried a nurse as to why patients always had to be undressed, even when bed rest was not prescribed, the nurse answered, "We like to have them ready any time, so that when the doctor comes, he can examine them right away."

Mentioned in the investigation were complaints about the "callous attitude" of some doctors and the "indifference" of many nurses and attendants; patients were annoyed by being awakened from a deep sleep at night to be given sleeping pills. Similar dissatisfaction was expressed by many who were aroused at 5:00 or 5:30 A.M. to have their faces washed. The rigid eating schedule frequently accompanied by cold, unappetizing food was also censured. There was resentment toward hospitals that demanded payment on admission, and it was noted that some patients found the visiting hours inadequate.

The investigation, which began two years ago, was precipitated by an alarming number of malpractice suits against physician members of the California Medical Association. "Although this is a national problem," states the *Look* article, "the situation in California is particularly bad." Due to the prevalence of these suits, a number of insurance companies which provided coverage for doctors either discontinued issuing policies or boosted the premiums considerably. The situation became so acute that some surgeons would not perform certain high-risk operations, fearful that costly lawsuits might result in case of failure.

To protect its members, the California Medical Association decided to investigate why patients sue doctors. Sociologists, psychologists, and psychiatrists were selected by the association to study all aspects of the problem. Interviews with physicians and patients involved in the suits revealed that many of them were emotionally ill. "It became clear that psychological reactions are more important factors in malpractice lawsuits than the quality of treatment or whether the doctor makes a mistake in medical judgment," Mr. Berg reports in the article.

Investigators discovered that a disturbance in the physician's emotional make-up occurred just as often as it did in that of the patient. They declared that a doctor frequently involved in malpractice suits is "fearful, immature, suspicious and dependent upon the patient for the gratification of emotional needs, often at an unconscious level." Some of the patients who had sued commented that if the doctors treated them more like human beings they would not have taken action.

Further study revealed that in most instances patients were hospitalized during the treatment for which the physician was being sued. "The psychologists reasoned that the anger might have started with a hospital incident and that perhaps patients were venting their annoyance against hospitals by suing their doctors," states the article. This factor was responsible for the investigation into patients' attitudes toward hospitals.

"Good" and "Bad" Hospitals

Investigators were assigned to eight California hospitals, half of which were rated "good" and half "bad." In the former, physicians were rarely sued, but in the latter, patients took frequent legal action against the medical staff. The purpose of the survey was to compare patient care in both types of institutions. The report disclosed that although the "good" hospitals treated patients better than the "bad" ones, they still "fell short of what a hospital should be."

Findings involving the "bad" hospitals revealed that patients were charged excessively for medications and sometimes billed for drugs they did not even get. Medical reports at those hospitals were unreliable and in some cases the records of abortions and deaths had been falsified. In one instance, a staff physician performing a tonsillectomy engaged his partner (who was unqualified) to give anesthesia—and collect the usual fee for administering anesthesia. The hospital administrator objected to this, but the doctor went above him and received consent from the chief of surgery, who, in turn, reproached the administrator. Result? During the operation, the child expired in cardiac arrest. In another "bad" hospital, a scrub nurse discovered a broken bit of an instrument following an operation. She notified her superior, who showed it to the surgeon and suggested that the patient be X-rayed to determine whether part of an instrument might have been left in the patient. The surgeon replied, "It is so small it couldn't harm her."

Although the so-called "good" institutions were not guilty of such severe violations of professional conduct, they were not exempt from criticism regarding food, visiting hours, excessive bills, and inadequate attention from nurses and attendants. Patients also complained that they were not being told what was happening to them.

An interesting fact noted by the association's experts was that few patients complained about mistreatment while in the hospital. It wasn't until weeks or months later that much of the censure was expressed. The investigators reasoned that during a hospital stay the patient, ill and fearful, felt helpless and dependent. They reported: "His symbols of personal identity are removed; his clothes are counted and taken away, so is his jewelry and often his small change. He is provided with a type of bed clothes to which he is ill-accustomed and which hardly enhance his self-image; he has to give up his upright position, symbol of his strength and humanness; his sense of privacy is violated; all persons who belong to the hospital, and whose belongingness is emphasized by white coats and uniforms, have unlimited access to his

(continued on page 34)

preview of the National League for Nursing convention

An estimated 4,000 members of the National League for Nursing, their friends, and others interested in the program will attend the 1959 N.L.N. Convention in Philadelphia, Pa., the week of May 11.

An additional 3,000 persons are expected to participate in the annual meeting of the National Students' Association, which will commence on May 8 and extend until May 11, overlapping the N.L.N. meeting by one day.

During the convention the theme, "Nursing for a Growing Nation," will be developed through program meetings, panel discussions, daily film presentations, and exhibits. As we go to press some finishing touches still have to be put on the convention program, but the major portions of the program have been completed and the highlights are included here.

First Panel

The convention will open Monday morning, May 11, with a panel discussion on "Using Research Findings in Evaluation of Nursing Procedures," moderated by Eleanor Lambertsen, assistant secretary of the Council on Professional Practice of the American Hospital Association. The first business meeting will be held Monday afternoon.

That evening Norman Cousins, editor of *Saturday Review*, will deliver the convention's keynote address; the topic of his speech has not yet been announced. Mr. Cousins has made international health problems a strong interest of his magazine and has been described by President Eisenhower as a "distinguished editor who stands as a symbol of America's creative, crusading, and sensitive mind."

Tuesday morning the following panel will discuss "I Have Tuberculosis—My Nurse Needs Help": Mrs. Elizabeth Fulcher, public health nursing consultant, Waynesboro, Ga.; Mrs. Vivian O'Brien, supervisor, pulmonary disease service, Kennedy Veterans Administration Hospital, Memphis, Tenn.; and a former TB patient.

Moderator of the discussion will be Lucy D. Germain, director of the departments of nursing and nursing education at Harper Hospital, Detroit, Mich. In the afternoon chairmen and members of state and local interorganizational committees on tuberculous nursing will participate in a workshop.

Another Tuesday morning meeting will be that of the Council on Psychiatric and Mental Health Nursing. At this meeting the topic, "Preparation of Psychiatric Aides," will be discussed by Walter Pullinger Jr., psychiatric aide at Philadelphia State Hospital; Herbert J. Butler, assistant chief, nursing education, Veterans Administration Hospital, Brockton, Mass.; Luther Christman, nursing consultant, Michigan State Department of Mental Health, Lansing; and Frank J. Shea, assistant director, N.L.N. seminar project for teachers of psychiatric aides.

Mary M. Redmond, associate professor of psychiatric nursing, School of Nursing Education, Catholic University of America, Washington, D.C., will be moderator of the discussion.

Following a morning business meeting and luncheon, the Council on Practical Nursing will hold a panel discussion on "Practical Nursing Potential in Good Nursing Care," which will be moderated by Mrs. Mildred Bradshaw, director of nurses at Lehigh Memorial Hospital, Norfolk, Va. The panel will include Mrs. Pearl Baker, directing supervisor, Central School of Practical Nursing, Cleveland, Ohio; Cecelia M. Hauge, director, nursing service, Veterans Administration Department of Medicine and Surgery, Washington, D.C.; Eleanor Lambertsen; and Eleanor Bowen, director, practical nurse research project, Metropolitan State Hospital, Waltham, Mass.

At the evening meeting of the Council on Maternal and Child Health Nursing, Ruth G. Taylor, chief of the nursing section, Children's Bureau, United States Department of Health, Education, and Welfare, will talk about "Maternal and Child Health Nurses for a Growing Nation."

There will also be a luncheon and meeting sponsored by the Council of Member Agencies of the Department of Public Health Nursing on Tuesday, as well as meetings on occupational health nursing, nursing careers, historical source materials in nursing, and nursing in disaster.

The next day, at the luncheon sponsored by the Committee on Community Participation, Mrs. Oswald B. Lord, United States Representative to the United Nations Commission on Human Rights, will be guest speaker.

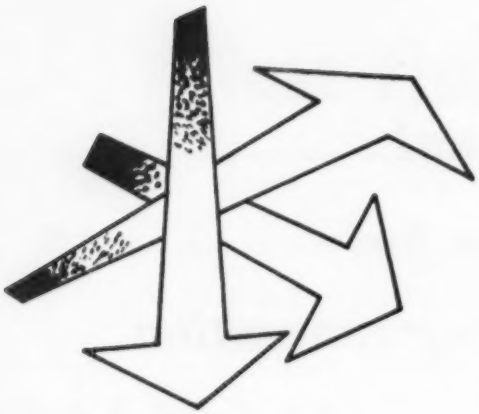
Premiere Performance

Wednesday afternoon the first public performance of "3 Maple Street," an American Theatre Wing play written expressly for the Department of Public Health Nursing by Nora Stirling, will be presented. Commentator for this session will be Dorothy Wilson, director of the New Haven (Conn.) Visiting Nurse Association.

Hans O. Mauksch, chairman of the Department of Social Science at Presbyterian-St. Luke's Hospital School of Nursing, Chicago, Ill., will speak about "The Patient Care Unit As a Reflection of Hospital Structure" at the afternoon program meeting of the Department of Hospital Nursing. A brainstorming session will follow Mr. Mauksch's talk.

During the day there will also be business meetings of the Department of Diploma and Associate Degree Programs and the Department of Public Health Nursing and a program meeting for membership chairmen and treas-

(continued on page 32)



Quantity, quality, and reward comprise the nursing school's

THREE

by **AGNES GELINAS, R.N., A.M.**
Chairman, Department of Nursing, Skidmore College, New York City.

IN its broadest perspective, American education for nursing is confronted with a three-dimensional problem.

One dimension of this problem is quantity. Our schools of nursing are now beginning to meet the needs of the largest student enrollment in history. But in the years ahead the number of men and women who could choose nursing as a career will be much greater than at present. By 1970, for instance, the number of young persons who could choose nursing will at least be doubled, perhaps tripled.

The second dimension of the problem facing nursing education is quality. The potential nurse who is successful in her educational efforts acquires knowledge, mental training, and skills imparted by the instructor. Many factors are involved in the quality of professional education—the ability of the teachers, the methods of instruction, and type of school classrooms, clinical facilities, field agencies, learning experiences. Included here also are the support and encouragement of quality education by the state, by the community, and by the parent institution (community college, senior college, the hospital).

The third dimension is what I should like to call the reward of education. By this I mean what is taught and the ability of the schools to teach it when it is needed. This involves the versatility of education—its capacity to change, to accept new program designs, to train according to changing tasks, hold on to what has proven of value, anticipate the needs of the future and expand by adopting new practices.

I want to emphasize that I include in this dimension the prime responsibilities of education, which are to give the individual a sense of values, knowledge of the conditions in which she must live and work, and a feeling for the changing world in which she must make choices.

The three dimensions of our nursing educational problem—quantity, quality, and reward—are interrelated and interdependent, and this must be recognized if nursing education is to serve the purpose of the individual and the health needs of the nation.

Our problem is twofold. We not only have future needs to meet, but we must also overcome accumulated serious deficiencies in our schools of nursing. All of the facts about educational needs today point to one clear conclusion: We must catch up and keep up.

Many things will be needed before we can catch up and keep up in nursing education. The American people must face the hard fact that one of these things is money, much more money than we have ever spent for schools of nursing, perhaps much more money than we have ever thought would be needed for our schools. And the money must be contributed by all levels of government—local, state, and Federal—as well as from private sources. Unless we accept this fact and are willing to act on it, progress in nursing education will be stalemated.

Our country cannot afford to fall behind in nursing education. We have expanding financial resources, increasing population, and such social changes as longer life expectancy and rising standards of medical care and health care at all levels of the population. To a certain extent, nursing education has been responsible for some of our social progress. It is indeed sad that our society does not devote enough of its expanding resources to ensure that our schools of nursing will prepare the number of competent nurses needed to continue this social progress. It is sad, too, that we now permit shortages of trained personnel to slow health advances and weaken our national security.

Society's Role

Today society should pay more of the cost of nursing education, for this country can afford any kind of nursing education it wants. But we have not yet determined the cost of nursing education, and we have not persuaded the people that nursing education is important. Until we do, it will not be financed as it should.

The problem of catching up with the needs of schools of nursing is illustrated also in the shortage of facilities for the increasing crops of young people ready for post-secondary school training in nursing.

According to the Nurse Resources Study Group of the State Education Department, in 1960 there will be a shortage of classroom facilities for 716 students in New York State alone, by 1965 there will be no accommodations for 2,047 students.[1]

The two-year community or junior college offers one possibility for expansion, and these institutions are being encouraged to offer quality two-year associate degree professional nursing programs.

The hospital schools are doing a valiant job of educating a large percentage of the nurses. Some feel that if they were given greater financial support they would be willing to shorten and strengthen their three-year programs, so that eventually they could take more students.

Other degree-granting colleges and universities with four-year programs could also expand, given greater financial resources. Since the upstate and downstate medical centers of the State

Miss Gelinas recently delivered this address at the annual convention of the New York State League for Nursing Education in Rochester, N.Y.

[1] "The Nurse Resources Study Group Needs and Facilities in Professional Nursing Education in New York State," The University of the State of New York, The State Education Department (Albany, N.Y., 1958), p. 42.

DIMENSIONAL PROBLEM

University of New York offer no nursing programs today, should they consider their roles in educating nurses?

I am certain that given financial support and encouragement by the state, community, and parent institution, existing schools and new schools could assume their proper roles, not only in educating nurses but also in training nurse-educators.

The education of nurses is handicapped not only by a shortage of funds and facilities but also by a shortage of faculty. The growing concern that has spurred action for developing better schools of nursing has recently slightly reduced this shortage. We now have more teachers with higher qualifications than ever before, and more nurses are taking courses in teacher-training and in educational administration. But we need more able teachers—especially college teachers—than ever before, and the need will continue to grow in the years ahead.

At present, staffing their facilities is of more concern to educational administrators than getting the money they need or increasing the plant to provide for the present expanded student enrollment. Good teachers of nursing are always in demand and it is expected that they will become one of the scarcest commodities in the country.

The two-year community colleges need teachers who are prepared to teach in junior colleges. But the faculty problem is looming even larger in four-year colleges having nursing education departments. The mark of the desired teaching abilities needed for college teaching has traditionally been the Ph.D. degree. Although deans and presidents of colleges often say that a doctorate doesn't make an able teacher, when it comes down to establishing criteria for the acceptance or promotion of a faculty member, discussion of the problem has made it plain that those holding Ph.D.'s are preferred because that degree is a mark identifying the disciplined work and scholarship they seek in a college teacher.

The outstanding collegiate nursing school today is more than the student-faculty partnership leading to the award of a degree to the successful student. It is more than the educational unit in the college that educates students to become nurses and responsible citizen-leaders. As an integral part of a college or university, the school of nursing carries the clearly understood responsibility of carefully conducting experiments in nursing, the results of which are shared with many other nursing schools in this and other countries. As a collegiate nursing school which is part of a medical center, it also furnishes a large amount of nursing service, since teachers and students care for patients in the process of education.

These functions of teaching and giving nursing care are augmented by another function—that of research. Concentration on the nursing needs of patients is making it obvious to faculties in collegiate departments of nursing that there are vast potentialities in nursing which have not yet been discovered. This has led to increased interest in conducting research in nursing.

Research requires prepared investigators, time, and funds. The prepared investigator needs a lighter teaching load so that she will have time to explore critically the literature in a limited field, practice experimental nursing, bring an investigation to a conclusion, and write a report. The funds for such research are available from governmental and private sources.

Today there are too few colleges and universities with schools of nursing that accept their just threefold responsibility of teaching, research, and nursing care. Important benefits will flow to patients during the years to come if only we can provide students with teachers who can teach and at the same time engage in fundamental research and studies in nursing.

We must catch up by attracting more able students into nursing. We should realize that there are educational deficiencies which limit careers in nursing.

Every year, thousands of America's brightest youngsters end their formal education at the high-school commencement exercise. Potential nurses who could develop into leaders in the nursing field are lost because they lack the necessary drive or money, or even the awareness of their own potentialities and the career opportunities in nursing. This waste of intellectual resources is a loss to the nation. But perhaps even more important is the loss to the persons concerned. They could and probably should continue to develop their talents. But they don't.

The problem of catching up with the needs of schools of nursing is further illustrated by the shortage of essential learning experiences for students and the ability of the schools to teach when it is needed. A few instances illustrating shortage of essential learning experiences for students and the ability of the schools to teach when it is needed follow.

For example, the nursing student should have a knowledge of the natural, biological, and social sciences if she is to be equipped to promote health and to comprehend disease; training in basic fundamental principles is essential before the student can interpret clinical applications of biochemistry and biology. So many preclinical courses offer such extensive orientation toward clinical applications to disease that we run the danger of increasing vocationalism in nursing education. We have a few clinical instructors of nursing who are well prepared to interpret clinical applications to biology and biochemistry. And those instructors depend on the basic science teacher to give a student

(continued on page 32)

Orientation, ingenuity, and practice aid the public health nurse to meet the unique nursing problems in our 49th State.

Nursing from ANGOON to KAKE

by **GERTRUDE SIPPLE, R.N., B.S.**
Regional Nursing Administrator for Southeastern Alaska, Alaska Department of Health, Juneau, Alaska

Author Gertrude Sipple, a public health nurse, rests in Juneau while waiting for the plane to take her south to Angoon.

"WHATEVER have I gotten myself into now?" I asked myself as I walked with my nursing supervisor along the board walk of Angoon, an Indian fishing village in Southeastern Alaska. She was accompanying me to the health center and apartment which were to be my part-time home for the next three years while I was serving in the Angoon-Kake itinerant nursing service. I could not have believed at that time that three years later when transferred to work "at the top of the world" in Barrow, I would regret leaving Angoon and the people whom I had come to regard as my friends.

Earlier, on my arrival in Juneau, I had been met by the assistant director of nurses and my supervising nurse, who told me that I would spend a week in Juneau for orientation. It would be a time for meeting the people in the central office of the Health Department and for trying to absorb as much as possible about general programs of the Alaska Department of Health, particularly as it related to the work of a public health nurse. I also learned of my assignment as itinerant public health nurse to Angoon and Kake, the plan being that I would spend alternate months in each locality. I discovered that both villages were small, with populations of around 400 each, that they were fishing villages with little cash income from any other source, and that each had a school which offered instruction through the eighth grade. Neither village had any medical care available. When a resident needed medical care he had to take a boat or plane to town—either to Juneau or Petersburg. Sometimes weather made such a trip impossible. Therefore, I was told, it was expected that the public health nurse would give emergency nursing care, and part of the orientation time was spent in learning something of the type of care I was expected to give.

The Alaska Department of Health furnishes each nurse with a copy of its medical standing orders which in general cover most situations, although I was to learn later that my ingenuity would be taxed at times. During this orientation period, too, there was time for practicing some of the special techniques which are not often expected of public health nurses in areas with medical care available. These techniques included drawing blood for serology, testing for hemoglobin content in blood, and testing urine specimens for sugar and albumen. There was also discussion on delivering a baby. Unfortunately, for the P.H.N.'s peace of mind, it is not possible to practice this procedure.

There was also time for last minute shopping for clothing which experienced Alaskans felt would be needed. And there was time to see slides of the two villages which were to be my home—even time for sight-seeing. I found the weather in that part of Alaska more apt than not to be wet and stormy at the time of the year I arrived, and later I had ample use for warm clothing. During my orientation they told me that weather in Southeast Alaska is not very cold but often feels cold because of the dampness. One learns, they said, to take the weather in stride and live with it. When there are beautiful days they are so beautiful that it is easy to forget about the bad ones.

Although I had already been in Alaska for 11 days, I still wasn't quite prepared for my first view of the village where I was to work. The flight from Juneau in a small amphibious plane had taken about 40 minutes and the view from the plane was wonderful. These planes do not fly very high, making it possible to see many things that aren't seen from the large, higher-flying planes. We landed about a mile from Angoon in an inlet and were met at the float by the local agent of the airline, his wife, and the principal of the school. After a cup of coffee at the agent's home, an act of hospitality which was repeated on my many later arrivals, we were escorted to my future apartment.

First Impressions

The road wound along the inlet through the trees until it came to the village. There it became a board walk, in poor repair, and one soon learned to watch his step, particularly in icy weather. Houses were built on either side of the board walk and in some places the houses were built on high pilings, permitting the water to rise up underneath the houses at high tide. Most of the houses needed paint, probably one of the reasons for my first impressions. Later I was to learn that paint was one

of the common needs in fishing villages and that many of the houses are actually quite comfortable inside. Bathrooms were very scarce in the town; some houses had cold running water, while many had no running water at all. But almost all the time there were willing hands to pour water over a basin and help in other ways, so giving nursing care in such surroundings proved not to be the insurmountable problem it seemed at first.

The nurse's apartment, the made-over upstairs of the house where the school principal and his family lived, proved to be fairly comfortable. After learning the quirks of the kerosene cook-stove, I learned even to bake bread in it. The oil stove used for heating worked well after I learned to pour the oil first through a felt strainer to take out the water; somehow the water simply would not burn!

The biggest asset of the apartment was the breath-taking view from the living room window of the waters of Chatham Straits and the snow-covered mountains of Chichagof and Baranof Islands. Oh yes, I had running water, too, except when the pipes from the town water tank were frozen or when there wasn't any water in the tank because of a dry period. The bathroom was often the warmest room of the house because it seemed to get heat from the apartment downstairs. I found kerosene lamps to be quite cozy because although electricity was provided from the school light plant, the plant was used only for school activities.

Two small but usable rooms in the school building comprised the health center. Again, from these rooms, one could see that beautiful view! There was a kerosene stove on which to boil equipment and, much to my amazement, a small electric autoclave. Unfortunately, the autoclave drew a large amount of current, so much that it could never be used when lights were needed in the school rooms. In fact, use of the autoclave was a problem until it was found that autoclaves could also be used to can deer meat or steam pudding. After this discovery, and by wise choice of sterilizing times, adjustments could always be made in other people's plans, and the autoclave could be used as needed.

The Angoon-Kake nursing service had been without a nurse for about six months when I arrived and, although others had used the health center as a sort of first-aid supply room, no one had felt it was his responsibility to keep it in order. Therefore, cleaning and arranging equipment was the first item of business. The supervising nurse was most helpful in this, insisting that it was one of the tasks of nursing supervisors in Alaska, otherwise the new nurse might be overwhelmed with the confusion of not knowing where things were when she needed them.

It seems that a nurse no sooner gets to a village in Alaska than people want to see her about some acute illness or injury. Like people everywhere, villagers are most interested in care when they are sick. The preventive aspect of the nurse's work in the small villages is always somewhat of a problem, time-consuming, often seeming to be never-ending.

Eventually, however, the nurse learns that she can do much of her preventive teaching through the care of acute conditions, and that, of course, helps to bring satisfaction with the work. She also learns to do the best she can as a nurse and to realize that she, as one individual, cannot control everything.

The work of an itinerant nurse is not easy but it has many compensations and pleasures. While one tries to keep definite hours of work this is not always possible. Yet this has advantages. On a particularly nice day when work is not pressing, there may be an opportunity to go for a boat ride, a picnic, or simply for a walk on the beach. Some of these "spur-of-the-moment" activities are often the most enjoyable.

Then there are the times one gets a boat ride en route to see a sick child. On one of these trips the water was so rough I felt the next day as though I had been horse-back riding—but it had been a beautiful trip. When the Angoon people moved to their salmon cannery during the summer months I moved with them. I always managed to get moved on one of the fishing boats, and each time I was sure some of the supplies would be lost in the ocean when loaded on or off the boat. But somehow they never were!

A treat while at the cannery was a trip on the boat known as the tender, which was the boat used to collect fish from the traps, a process known as brailing. And, of course, while on the subject of fish, there's the landing of that first salmon!

Other than care for acute illness or injury, the public health nursing program in Alaska is similar to a generalized program elsewhere, with some exceptions: The nurse must carry out some procedures often handled elsewhere by a doctor—checking the pregnant women, checking the babies in well-child conferences, and doing immunizations. I found immunizations to be a most popular program with all but the small children! Most Alaskan natives have been well educated to the value of immunizations. One problem, however, seems to be to get the mothers to remember to bring the little ones back to complete the immunization series.

Then there's the work with community groups, the Health Council probably being the main one with which the nurse is directly concerned. Organization and functions vary, depending upon the village organization. In both Angoon and Kake, the Health Councils usually take charge of raising most of the funds for purchasing supplies and paying part of the costs of the nurse's transportation from one village to another. They also assist with special projects such as X-ray surveys and promote special health education projects. Interest varies somewhat, depending upon the leaders.

Another special function of the public health nurse in a service such as the one in Angoon-Kake is to assist when a doctor visits the village for school examinations or to conduct special clinics. The nurse is expected to make the arrangements, schedules, and plan the work. Usually the doctor is willing to see as many patients as time permits. One learns to adjust plans on short notice, to assist the doctor in working in quarters and with equipment something less than ideal. With a certain amount of ingenuity on the part of both doctor and nurse it is often surprising what is accomplished.

An Alaska Coastal Airlines pilot, Stuart Adams, helps Miss Sipple onto the plane.

"Good-bye"

Sometimes quickly and sometimes slowly, time moved on and it came time to say "Good-bye" to Kake and Angoon. During my stay in those villages there were times when my first impressions returned and I wondered again why I had ever come to work here in Southeast Alaska. However, in looking back over the three years, I realize I have much of value to cherish and remember always; I have friends there I'll never forget.

Figure 1

This type of term project can be fun—and informative—for both instructor and student in the Fundamentals of Nursing course.

Poster Project

by **LOUISE WIEDMER, R.N., M.S.**
Assistant Professor of Nursing, Medical College of Virginia, School of Nursing, Richmond, Va.

IN teaching the course on Fundamentals of Nursing, I have found that poster-making can be an educational, interesting, and worth-while term project for students. They find it relaxing, fun to do, and do not look upon it as additional hard work. It gives them an opportunity to express themselves while learning, and many of their characteristics are reflected through such a project.

For the past few years my students have benefited from this project, which has served as one of their learning experiences. During one of the first classes, when the plan of the course is discussed, the poster-project assignment is made; each student is asked to make a poster demonstrating something that she learns in the course. It is suggested that original ideas be used for the posters which are to be completed by the end of the course. After the students choose their titles and have made plans for developing their ideas, they go to their instructor for approval and guidance. To be sure all areas of the course are represented and to keep duplication at a minimum, the instructor keeps a record of her students' plans.

Ideas Represented

In my past classes, the ideas represented were many, varied, interesting, and informative. Each unit of the course was emphasized in several ways, and there was additional pertinent information represented on several of the posters. Here I should like to summarize the content of these posters.

The requirements of the Fundamentals of Nursing course, including creativeness, adaptability, reasoning, endeavor, neat and legible notes, putting theory into practice, and adequate study using helpful books, were expressed in one poster.

In others, good grooming, correct uniform, and desirable characteristics of the nurse were demonstrated in a variety of ways. With these ideas in mind, personal hygiene points such as bathing, shaving armpits and legs, using a deodorant, etc., were stressed as grooming "musts" for the nurse. The comparison of correct and incorrect uniform was made, and a picture of a patient describing the characteristics of the nurse of his choice was quite effective.

Many improvisations, knowledge of which is essential in order to give basic nursing care, were actually made on a small scale. They were organized and arranged in an attractive way on several posters. Some of the articles depicted were bedpan, bedroom slippers, bed protector, bed cradle, toothbrush, robe, back rest, and over-bed table.

Several students took much interest in showing how to care for the patient's hair. One poster had gray and brown yarn arranged in suitable hair styles for the female patient. These hair arrangements were on models that had been drawn on the posters. This student was quite clever in demonstrating how to hold the hair while combing it. A hand, made from paper, held the comb which was in the hair made from yarn.

Spiritual needs of the Protestant, Catholic, and Jewish patients that should be anticipated by the nurse were demonstrated in some of the posters. Basic requirements depicted were the Bible opened at the 23rd Psalm; calling the clergyman, priest, or rabbi; preparation for his visit; and an appreciation of the dietary factors, as well as those factors involved in baptism, communion, and other sacraments.

The role that desirable morning and evening care play in making the patient comfortable, both mentally and physically, was emphasized from the aspect of the objectives of such care. Requirements for obtaining best results with patient care were also illustrated.

Many nursing procedures were illustrated by showing the right and wrong ways of performing them. One interesting poster consisted of a group of snapshots of procedures being done by students. Many of the common errors which one may see every day in the hospital were included. The poster was entitled "What's Wrong With My Procedure?" Under each picture was a list of the errors, covered with a paper flap. Every student enjoyed doing a self-evaluation, since there was no grade involved.

Another poster using snapshots emphasized how the nurse could aid in preventing accidents in the hospital. Some of these pictures showed opening a sterilizer; keeping extra equipment, such as mops, in proper places; keeping sheets from hanging and becoming entangled in wheels of stretchers; and covering the hot water bottle.

The use of innumerable comfort appliances necessary for basic nursing care were quite adequately presented. Another poster was titled "Can You Judge Distance Correctly?" It showed the many instances where the nurse has to be capable of judging distances accurately and quickly. Such is the case in determining the width of gauze and adhesive, the angle of the bed, the area involved in reaching for articles, inserting the thermometer, diameter of an ulcer, and placement of a rubber sheet on the bed.

What students should teach patients regarding basic nursing care was demonstrated in many valuable ways. How to improvise, factors necessary for rest, methods of promoting good elimination, and what the patient should learn when he is admitted to the unit were illustrated.

Privacy, security, and esthetic factors,

which are sometimes overlooked in nursing, were stressed—with much importance placed on the comfort and prognosis of the patient.

The relation of the physical and social sciences with the nursing care of the patient was not forgotten in the project; it was emphasized as being a necessary part of the curriculum for student nurses.

One student, in her poster, showed how knowledge gained in Fundamentals of Nursing is used when giving nursing care to patients in all clinical areas. Feeding a child in the pediatric ward, recording in obstetrics, checking blood pressure of surgical patients, filling hot water bottles for medical patients, and using bed rails for psychiatric patients were all shown.

Evaluation

At the end of the term the posters were displayed in a classroom for several days for both faculty and students to review. The posters were judged according to the following criteria: (1) accuracy of information and clearness of presentation, (2) attractiveness and color appeal, (3) neatness, (4) originality, and (5) legibility, appropriateness, and attractiveness of lettering, when used.

The first year of the project a poster without any lettering (Figure 1) caught the attention of everyone. The upper half depicted an uncomfortable patient in an untidy room. It seemed to imply that a careless, uninterested nurse had attended him. As the student nurse entered the door she, as well as the patient, had the corners of the mouth turned down, as if unhappy over the situation. In the lower half of the picture the many errors were corrected. When the sophomore student at the Medical College of Virginia School of Nursing pictured on the poster left the room after correcting all these mistakes, the patient's expression was completely changed to one of happiness and contentment. This poster without any lettering was judged by both faculty and students as being the best of the many exhibited that year.

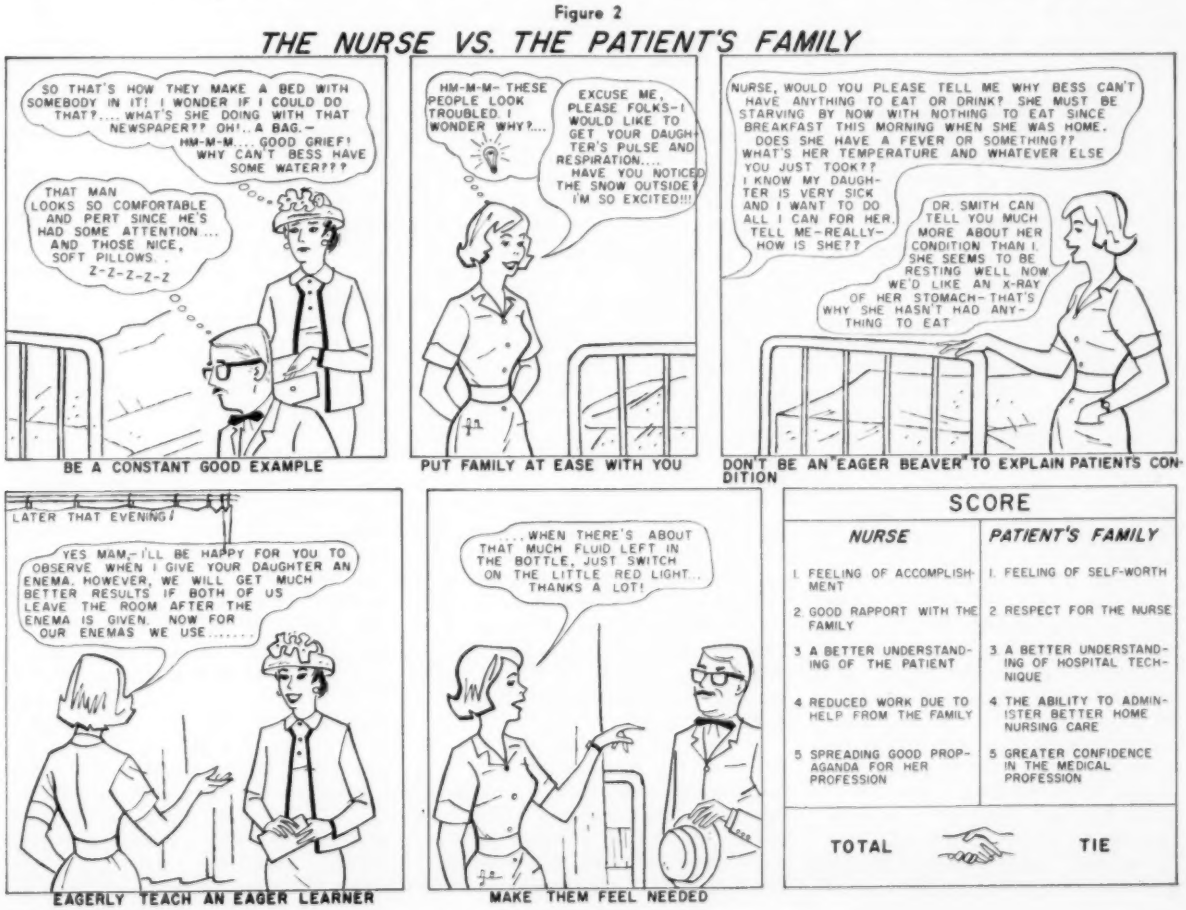
The next year the posters were displayed in the same manner, and the poster chosen by the students was the same as that selected by the faculty. The picture (Figure 2), drawn by Mrs. Shirley Wampler, stressed how, through the use of good judgment in answering questions and conversing with the patient, the nurse could instruct the patient. Five main ideas were demonstrated: (1) Be a constant good example, (2) put the patient's family at ease, (3) don't be too eager to explain the patient's condition, (4) eagerly teach an interested learner, (5) make the patient feel needed. In the last block, a score of the nurse's relationship with the patient's family was given. As one can see, a good relationship was obtained because both nurse and family had a feeling of accomplishment.

Use of Posters

Time was taken in class to discuss the good points and the errors of each poster. Appropriate posters made by students in previous years are still used on the bulletin board for teaching purposes, as contributions to other students' learning Fundamentals of Nursing. And students look forward to seeing the bulletin board displays.

For the instructor, as well as the students, the poster-making project has been an invaluable learning experience. It has been worth while in revealing to the instructor more about her students' workmanship, imaginative abilities, alertness, and organization of ideas.

Figure 2


THE NURSE VS. THE PATIENT'S FAMILY
SO THAT'S HOW THEY MAKE A BED WITH SOMEBODY IN IT! I WONDER IF I COULD DO THAT?.... WHAT'S SHE DOING WITH THAT NEWSPAPER?? OH!.. A BAG.— HM-M-M.... GOOD GRIEF! WHY CAN'T BESS HAVE SOME WATER???
THAT MAN LOOKS SO COMFORTABLE AND PERT SINCE HE'S HAD SOME ATTENTION... AND THOSE NICE, SOFT PILLOWS.. Z-Z-Z-Z-Z
BE A CONSTANT GOOD EXAMPLE
HM-M-M- THESE PEOPLE LOOK TROUBLED. I WONDER WHY?...
EXCUSE ME, PLEASE FOLKS- I WOULD LIKE TO GET YOUR DAUGHTER'S PULSE AND RESPIRATION... HAVE YOU NOTICED THE SNOW OUTSIDE? I'M SO EXCITED!!!
PUT FAMILY AT EASE WITH YOU
NURSE, WOULD YOU PLEASE TELL ME WHY BESS CAN'T HAVE ANYTHING TO EAT OR DRINK? SHE MUST BE STARVING BY NOW WITH NOTHING TO EAT SINCE BREAKFAST THIS MORNING WHEN SHE WAS HOME. DOES SHE HAVE A FEVER OR SOMETHING?? WHAT'S HER TEMPERATURE AND WHATEVER ELSE YOU JUST TOOK?? I KNOW MY DAUGHTER IS VERY SICK AND I WANT TO DO ALL I CAN FOR HER. TELL ME—REALLY— HOW IS SHE??
DR. SMITH CAN TELL YOU MUCH MORE ABOUT HER CONDITION THAN I. SHE SEEMS TO BE RESTING WELL NOW. WE'D LIKE AN X-RAY OF HER STOMACH- THAT'S WHY SHE HASN'T HAD ANYTHING TO EAT
DON'T BE AN EAGER BEAVER TO EXPLAIN PATIENTS CONDITION
LATER THAT EVENING
YES MAM,- I'LL BE HAPPY FOR YOU TO OBSERVE WHEN I GIVE YOUR DAUGHTER AN ENEMA. HOWEVER, WE WILL GET MUCH BETTER RESULTS IF BOTH OF US LEAVE THE ROOM AFTER THE ENEMA IS GIVEN. NOW FOR OUR ENEMAS WE USE.....
EAGERLY TEACH AN EAGER LEARNER
....WHEN THERE'S ABOUT THAT MUCH FLUID LEFT IN THE BOTTLE, JUST SWITCH ON THE LITTLE RED LIGHT... THANKS A LOT!
MAKE THEM FEEL NEEDED
SCORE
NURSE
1. FEELING OF ACCOMPLISHMENT
2. GOOD RAPPORT WITH THE FAMILY
3. A BETTER UNDERSTANDING OF THE PATIENT
4. REDUCED WORK DUE TO HELP FROM THE FAMILY
5. SPREADING GOOD PROPAGANDA FOR HER PROFESSION
PATIENT'S FAMILY
1. FEELING OF SELF-WORTH
2. RESPECT FOR THE NURSE
3. A BETTER UNDERSTANDING OF HOSPITAL TECHNIQUE
4. THE ABILITY TO ADMINISTER BETTER HOME NURSING CARE
5. GREATER CONFIDENCE IN THE MEDICAL PROFESSION
TOTAL
TIE

Which patients should have special duty nurses? What are some of the problems confronting these nurses and hospital administrators? A former hospital administrator describes

The Special Duty Dilemma

by **THOMAS P. WEIL**
Associate Consultant, John G. Steinle and Associates, Garden City, N.Y.

"IF WE could solve the special duty nursing dilemma, we would be able to lick the nursing shortage," the director of nurses at a well-known Eastern hospital said a few months ago. But why is special duty nursing such a problem?

What about those patients you hear of every day who want the luxury of special duty nursing, but really don't need the nurses? Remember how the patient's family insisted that Mr. McGuire have a special nurse, although medically such care was not indicated? Should specials be assigned to such patients?

Last winter when sitting in the office of a hospital director in the Midwest, I overheard a converstaion on the phone that proceeded something like this: "What kind of hospital is this that can't provide 24 hours of special duty nursing?" asked a middle-aged woman in a rather articulate tone.

The administrator replied, "Did you recently have an operation?"

"Yes," answered the lady in a dignified way. "I had a very painful hemorrhoidectomy eight days ago. It is not that I need the extra nursing care. The problem is that the women at the club will think that their president cannot afford a special."

"We'll see if we can assign a special duty nurse to your case," the hospital's director answered. "I'll have my secretary call the director of nurses."

Actually the administrator was evading the central issue in the case. He knew from the conversation that there was no medical reason for the patient to have a special nurse. There were dozens of more seriously ill patients in the house who had no private nurses. Rather than explaining to the patient the problems of obtaining an adequate number of special duty nurses, the administrator took the more expedient way out.

Not long ago I heard a nursing supervisor of a private pavilion in California express concern that the young graduate was not interested in special duty nursing. She stated, "On the one hand, the recent graduate is anxious to stay at the bedside and wants to get away from anything administrative, yet, on the other hand, one rarely finds a 20- or 30-year-old special duty nurse."

"Almost all of our younger top-notch nurses are staff, assistant head, or head nurses," she continued. "A few have even joined the ranks of assistant supervisors, taking them further away from the bedside. What's going to happen in the future?"

One Rhode Island R.N. who had been specialing for more than four decades remembered that 25 years ago student nurses were told that specialing would be nonexistent in less than a decade. With the rapid advances of medicine and the recovery room this prediction again is repeated. Yet, in spite of these predictions and changes in medical care, the tide for special duty nursing is still going strong throughout the country.

Of the 430,000 individuals actively engaged in professional nursing in the United States, some 74,000 are still listed as private or special duty nurses. With these startling statistics, one wonders whether specialing is really on the way out.

"Let's face it. Specialing is the lowest form of professional nursing and most of you are second-class citizens," said a 1954 graduate working as a staff nurse to a 53-year-old special with years and years of experience with neurological and neuro-surgical cases. "The care you give can be done by a practical. Your patients do not need a $17-a-shift guard."

"I work as a special only for the top two or three neurologists and neuro-surgeons on the staff," answered the veteran neuro special. "They book me in advance, if possible, for their craniotomy and brain tumor patients, and I work only for them. I have become a specialist in this field and do not have to take every case that comes along. One time a urologic patient, the next time a gynecologic case, and maybe two weeks later a postgastrectomy patient—that's not for me. The physicians I work for know the quality of care I give. A practical could never do the job, she doesn't know enough. Also, she hasn't had the experience."

The special added, "The patient is comforted by the fact that I have cared for dozens and dozens of cases like hers. In fact, some patients have commented that they have more confidence in me than in the house-staff physician. What are you complaining about anyway? We specials take care of the sickest patients and allow you to give more time to those on floor care."

"That's not true," answered the assistant supervisor who was listening to the conversation. "The sickest patients do not necessarily obtain a special. I am in full accord with the principle that private duty nurses should be assigned on the basis of the degree of the patient's illness. Also, that the special should be reassigned when the patient medically no longer needs her. The front office is at fault. They want all the V.I.P.'s in the house covered first, whether they need special nursing or not. Then there are those patients whose families shout the loudest. We assign nurses to them so that we can avoid continually being pestered by them. An even larger group of ill-used specials are assigned to those patients who can easily afford the luxury, but medically really do not need nurses."

A young hospital administrator and a well-known and respected nursing director of a large teaching hospital in New York City will soon have an article published in a hospital administration journal on the nursing shortage. Their major point with respect to specials is that hospital administrators, nursing directors, and physicians throughout the country must co-ordi-

nate their efforts and allot private duty nurses on the relative merit of the patient's need.

The patient's financial position, social status, or pressure placed on the hospital by the family, the attending physician, or even a member of the board of trustees should not be considered. Only medical need should matter.

They state that the hospital's administrative and nursing staffs and the medical board must agree on regulations governing the assignment of special duty nurses. Doctors must orient their apprehensive patients to the fact that these critically needed individuals must be reassigned when medically the patients no longer need them.

An administrator of a 250-bed community hospital once related to me the story of a physician who would scream, rant, and rave if his patient did not have a special duty nurse when one was requested. He even went further at one point and requested that if one was not available, a nurse should be taken away from a patient that no longer needed her services.

Several weeks later the nursing supervisor reassigned a nurse covering the same physician's 3-day postoperative appendectomy patient to another doctor's fresh cardiac case. He threatened the nursing supervisor that he would report the incident to the director.

The physician later admitted to the administrator, "I knew that my patient would receive proper care, but I was concerned with the repercussions from the family. How can I charge my normal fee? What kind of standing will I have in the eyes of my patients in this hospital if you take a special duty nurse away?" The physician was very willing to have a special reassigned to his patient, but not taken away.

"If hospitals had more efficient physical plants, we would not have a shortage of nurses," was stated not long ago by a consulting hospital architect. "Many times a special could handle two or more patients if they were in the same room. Every hospital should have progressive care—recovery room, maximum, intermediate, and minimum care units," the architect continued. "Such facilities would put most of the special duty nurses out of business."

He went on to say, "The senior special nurse would not be able to keep up with the pace in the recovery room. The services of a specialized special would still be needed on the maximum care unit. By the time the patient is transferred to the intermediate or minimum care facility, floor nursing care for most patients would be sufficient."

A New York R.N. commented, "Some of us would like to special two cases, either in the same or adjoining rooms. Then we would be able to be paid for two patients or at least receive $6-$8 more per shift for caring for the additional patient."

A young staff nurse standing near by replied, "If a special receives $24 or more a shift for handling two cases, I'll resign from staff and special too. I could even pick my shift and days off."

"Remember, a staff nurse has many employee benefits," said the special. "You have a month's paid vacation, 14 days of sick leave, Blue Cross, and free laundering of uniforms. In some hospitals, staff nurses are even eligible for low-rent apartments. The special is a private contractor."

"There are too few special duty nurses who are willing to handle more than one case," commented a supervisor of a semiprivate pavilion in Texas. "We continually have vacancies in our special duty nursing team units. A few extra dollars a shift is not enough inducement for the average special to handle the extra work."

"One of the great problems is that too many specials do not want or are not competent to care for the very sick patient. A few would rather act as companions than as professional nurses," mentioned a director of a registry. "They like the lighter cases."

On the other hand, one graduate stated, "I didn't go to nursing school for three years to become a baby sitter. My blood pressure goes up every time I hear a nurse ask the supervisor what type of case it is before signing in on a case. I take every case that comes along."

Refresher Course

Some nurses who graduated decades ago are not qualified to handle tough cases and need refresher courses. Many haven't kept up with current developments and changes in nursing by reading the professional journals.

A refresher program was instituted in Memphis by the Private Duty Nurses Section of the Tennessee State Nurses Association. In fact, in-service training on all levels of nursing is important because of the rapid changes in medicine. Such educational programs to date have not been carried out in most hospitals in the United States.

Another special expressed as her major concern the problem of some nurses practicing private duty without joining the official registry. "Those who are not members of a reputable registry," she said, "do not necessarily give the quality of care that the registry maintains. Higher fees for the registry resulting from decreased membership is not a factor."

Another special standing near by remarked, "We feel that there is not enough differentiation between the R.N. and the P.N. The practicals even wear black bands on their caps. The public cannot tell the difference between the one- and three-year nurses. The nursing directors and hospital administrators have pushed the practical business too far. A P.N. belongs in the home or in the hospital assisting the R.N. on the floor, not specialing a tough case."

Defining the problems of special duty nursing is not difficult. There are the problems of (1) the patient who does not medically need the special, yet demands her; (2) the doctor who wants the limited available supply assigned to his cases; (3) the special nurse who is concerned with status within the profession; (4) the staff nurse who considers the special a second-class citizen; (5) the hospital architect who thinks that changes in construction will solve the nursing dilemma; and (6) the public which does not understand why there is a shortage of nursing personnel.

The administrator of a hospital has quite a task to balance and reconcile all these relationships. This task requires such diplomacy that one wonders how long this situation can persist.

INTERVIEW with Katherine R. Nelson, R.N., M.A., Instructor In Cancer Nursing, Teachers College, Columbia University

WHAT IS RADIATION MEDICINE?

In this second interview Miss Nelson discusses with Associate Editor Julie E. Miale, R.N., how the use of radioactive isotopes in medicine affects nursing.

Q. Miss Nelson, radiation medicine has progressed rapidly over the past few years and now X-rays and radioactive isotopes are used widely in the diagnosis and treatment of disease. Nearly every hospital now treats patients with radioactive isotopes in diseases where they have proved helpful. This means nursing care must be developed to keep pace with medical progress; nurses should have new knowledge and understanding of radiation medicine. Do you believe the average nurse is adequately prepared in this area?

A. A professional nurse is qualified to nurse any ill person back to health. However, I am not sure the average nurse is as well informed in radiation medicine as she should be. I might go further and say that in my opinion the average nurse is poorly informed. I am concerned about the lack of attention given to the many problems associated with the nursing care of patients undergoing radiation therapy. Of course, many nurses are taking steps to acquire new knowledge, and they should make it their job to learn as much as possible about this vital subject.

Radiation therapy had its beginning 64 years ago in 1895, when Roentgen discovered X-ray. Three years later Marie and Pierre Curie isolated radium. I think that most nurses know, for instance, that an X-ray is an electromagnetic wavelength, and I think they understand generally how a stream of electrons is forced through the end of a heated filament to hit a target, at which time they are changed into X-rays. I believe that most nurses know that X-rays are the same as gamma rays, which are high-velocity rays. I think most nurses have been taught to have great respect for the X-ray. However, few nurses have even the very basic information about the all-important subject of radioactivity, the radiations given off by radioactive isotopes, and the relations of these radiations to nursing. Most nurses, unless they have availed themselves of the volumes of current literature on the subject, are either fearful or careless about this area of nursing.

Q. You have had a great deal of experience in this area, and I know you can help to clear up some of the frequently asked questions about radiation medicine. First, what is meant by nuclear, or radiation, medicine?

A. Radiation medicine, also known as radiotherapy, is the treatment of disease, most frequently cancer, by means of X-ray and radioactive substances.

Q. How does the nurse know how much time she can safely spend with a patient who is being treated with a radioactive isotope?

A. One of the first things for the nurse to do is to check the patient's chart to find out what isotope is being used and the date the patient received it. Then from her knowledge of the half-life—otherwise known as the decay rate—of the isotope, she can roughly estimate how long it is safe for her to be with the patient.

Sometimes the doctor may indicate the length of time one person can be with the patient and what precautions are to be taken. However, no nurse should ever take for granted instructions given her unless she is reasonably sure these instructions are reliable. Nurses should know what they are dealing with. They should know what kind of isotope the patient is receiving and the general principles governing nursing required by this particular substance. Then and only then can the nurse be assured of personal safety.

Q. In other words, you don't think it a good idea for the nurse to ask the doctor about the safety rules to be followed?

A. There is no reason for her to ask. This is something she should know. I don't mean to imply anything derogatory about the medical profession, but I do mean to say that nurses should know the general principles governing nursing care of patients receiving radiation therapy, or they should not be taking care of them.

Q. Since radiation therapy is now being widely used in all hospitals isn't it rather improbable for nurses today not to have experiences with radiation therapy?

A. That is exactly the point. Nurses have the responsibility of keeping up to date in this area. They need not be physicists or experts but they must keep informed on new developments in the medical field. While it is true that radiaion medicine is a complex subject, and even basic, practical information requires some effort, nurses must seek out information which will prove useful in allaying the unnecessary fears of the patient and the nurse and in arriving at the best possible kind of nursing care for the patient.

I know of instances where nurses were told by doctors: "Oh, don't worry about radiation, it won't hurt you." These physicians apparently ignored the fact that nurses spend considerable time with many patients and where high radiation dosages are involved, this may constitute a real hazard for the nurse.

Q. Miss Nelson, you spoke of allaying unnecessary fears. Do many nurses express fear of nursing patients receiving radioactive isotopes?

A. Oh yes, it is not unusual to hear nurses say they would not take care of a patient receiving a radioactive isotope.

Is the average nurse adequately prepared in the area of radiation medicine?

What isotopes are used in radiation medicine?

What are basic safety rules the nurse should follow?

During the summer session Miss Nelson is a special lecturer at the School of Public Health of the University of North Carolina.

Yet there is no need for fear because all radioactivity, though never seen or felt, is a known quantity. There is nothing vague or mysterious about the radioactive isotopes used in medicine today. Nurses who know the basic facts and who follow definite safety precautions where harmful rays are known to exist can give good nursing care, with no harm to the nurse, other patients, or hospital personnel.

Q. These basic facts you refer to—what are they, and can we discuss some of them here? For instance, what is radioactivity?

A. That is a large order, but here goes. Although man did not know it until the last 75 years or so, he lives in a world which radioactivity is always present. We swallow minute quantities of radioactivity in our foods; plants, soil, and sea water all contain some radioactive substances. Daily we are bombarded with radioactive cosmic rays from the sun. Yet we live and thrive in such an environment. Therefore we can see that the mere presence of radioactivity in itself does not constitute a harzard; the amount and kind of radioactivity received and the manner in which we receive it decide whether it is safe or not.

To be specific, radioactivity is the giving off of energy in the form of particles or rays as certain atoms decay. These particles or rays are known as alpha particles, beta particles or rays, and gamma rays. Another particle that is rarely encountered in medicine is the neutron. This is an atomic particle also, but is not one of the well-known treatment rays.

Q. Do these particles have special characteristics?

A. Yes, and that is why protective measures, when nursing patients who receive them, must also vary. A nurse who understands these measures will have no difficulty applying the proper ones.

Q. Will you differentiate between them? For example, what are the alpha particles?

A. Alpha particles are positively charged particles that travel only one or two inches in the air. They do not penetrate unbroken skin, and can be stopped by as thin a substance as a sheet of paper. They therefore present little or no external hazard to the nurse. However, alpha particles can present a medical problem if they enter the body through breaks in the skin, inhalation, contamination, or ingestion through foods or on hands. Therefore, where there is a possibility of contamination, care must be taken to keep open cuts bandaged, to keep the body, floor, tables, and other equipment clean; one should not smoke or eat in the contaminated area.

Q. Miss Nelson, what isotopes used in medicine are alpha-emitters?

A. All the natural radioactive substances having an atomic number above 83, which is bismuth, are alpha-emitters. In other words, the only two alpha-emitters actually being used in medicine today are radium and radon.

Q. I recognize radium, but what is radon?

A. Radon is a gas given off as radium decays. Like radium, it gives off a very large number of alpha particles and is valuable in interstitial treatment. The radon gas is captured inside fine gold wires which have holes in them like a hypodermic needle. The wires are then cut up into tiny pieces like the point of your lead pencil. These pieces are known as gold seeds. The doctors implant or insert these radioactive gold seeds right into the tumor tissue where they are left to perform their treatment.

Q. What do you mean by "left to perform their treatment"? Doesn't the doctor remove them eventually?

A. No, he doesn't. The half-life, or decay rate, of radon is approximately four days. By the end of a month the gold seeds are considered dead and are never removed.

Q. Are there any safety precautions the nurse should observe when working with gold seeds?

A. Yes, the gold seeds will be delivered to the operating room or the out-patient clinic in a lead container marked with the patient's name and the dose. They are placed in a "seed basket" and sterilized just as surgical instruments are. Then, observing sterile technique, the nurse will place them into the tips of interstitial needles, to be inserted into the patient's tumor. At this time I think it is very wise to do the work behind a lead shield, in order to shield out any dangerous rays.

Q. After the patient has had the gold seeds implanted in in his tumor is he radioactive?

A. No, the physicists I have talked to say that the patient's body absorbs the alpha rays and he is not dangerous to the nurse or members of his own family who come into intimate contact with him

Q. Previously, Miss Nelson, you said that radon and radium were both alpha-emitters. What about patients receiving radium, are they not dangerous?

A. It is true that radium, like radon, is an alpha-emitter, and as such is not dangerous to the nurse. But unlike radon, radium also is a gamma-emitter and as such is very dangerous—but more about that later.

Q. Let's get on to beta particles. Would you describe them?

A. Beta particles are negatively charged particles that may travel from one to 30 feet in the air but can only penetrate a half inch or so of unbroken tissue. Externally, metal or plastic shields or distance will protect a person or thing from beta rays. Internally, if swallowed, it would be dangerous for about two centimeters.

Q. P^{32} (phosphorus 32), commonly known as one of the atomic cocktails, is a beta-emitter, is it not?

A. Yes, P^{32} is a beta-emitter with a half-life of 14.3 days. It is a tasteless, odorless, colorless liquid that looks like water. Since phosphorus will be taken up by bone tissue, it is given to a patient as treatment in polycythemia vera and in chronic leukemia. Once the patient drinks the fluid containing the P^{32} it goes to the bones. Since the radioactive material is inside the patient and since it emits beta rays, which can travel such a very short distance, the patient and his care present no hazard to the nurse.

Q. What about the glass or cup the liquid was prepared in? Isn't it contaminated?

A. It is contaminated and should be handled with special precautions until "clean."

Q. Then beta radiations do not constitute a hazard, except for this?

A. When they are in the patient's body they do not. However, if they are spilled and soil the linen, or if the patient vomits the medicine, then obviously the linen and the vomitus are radioactive and should be handled with special care.

Q. I can see then that it is important to know dosages and the half-life of each radioisotope in order to determine the necessity of precautions.

A. Yes, indeed, because when used for diagnostic purposes, microcuries of radioisotopes are used, and these dosages are too small to represent a hazard to the nurse. But higher dosages—that is millicuries—are used for therapeutic doses, and require certain safety precautions. These precautions are based upon the half-life period of the radioactive element used.

Q. Well, we have covered alpha and beta rays; now what about gamma rays? Didn't you mention that gamma rays are the most penetrating of all?

A. Yes, this is the most dangerous of all radiations given off by an isotope, and if the isotope being used in treatment is a gamma-emitter the nurse should know it.

Q. Can you tell me more about these gamma rays?

A. Gamma rays are actually high-voltage X-rays. All radiations have what is known as wavelengths; if a wavelength is long it means the power is low and it does not travel very far. This is known as soft radiation, and is usually used in treating skin tumors, where the doctor does not want the treatment to penetrate too deeply.

High-voltage X-ray has a short wavelength and is known in the hospital as deep therapy, penetrating into tumors located deep in the body. The high-voltage X-ray can be administered by one-million-volt machines. These are very powerful, as you can see. We usually say these are 1 MEV, meaning one-million-electron-volt capacity.

To get back to a description of the gamma ray, it is a high-voltage radiation of 5 MEV or over. Now, when you stop to think about it, a gamma ray is actually the same as an X-ray that could be produced by an X-ray machine of five million volts or over! Now do you see why, when the nurse is in a room with a patient who has received an isotope that is a gamma-emitter, she must behave as though she were in a room with a high-voltage X-ray machine turned on?

Q. Yes, I see, but you make this sound so fearful. What can the nurse do in such a situation?

A. She must remember the two principles of protection: time and distance. In other words, the shorter the time the nurse is in the room, the less the amount of radiation she receives. Distance means that the farther away from the patient she is, the less radiations coming from the patient's body the nurse will receive.

Q. How can the nurse incorporate these two principles into her bedside care?

A. I like to plan nursing care before the patient receives the isotope. For example, Au^{198} (radioactive gold) is a gamma-emitter. This is a colloid substance with a half-life of about three days. It is a fluid and is injected into a cavity or into tumor issue by the doctor with a syringe and needle. The head nurse will know ahead of time that the doctor intends giving the patient this therapeutic substance, and she will tell this to the staff nurse who will prepare the patient by explaining to him that after the doctor gives him the powerful medicine, the nurse should not be in the patient's room too long.

Consequently, the nurse will render all the necessary care beforehand, such as complete bed bath, clean linens, pedicure, manicure, etc. After the radioactive gold has been injected the nurse will render only that nursing care that is absolutely necessary, so that she will reduce the time she is in the room. Obviously, this does not mean she will neglect the patient, but rather that she will so plan her work as to give the patient all the necessary attention, while staying in the room a minimum length of time, for her own safety.

Q. What about the principle of distance? Doesn't this also need to be considered?

A. It is amazing to me that so few nurses know how to apply this simple principle. We are aware that physicists and doctors use long-handled tongs to handle radioactive isotopes, and yet we do not realize that this is an illustration of the use of distance as a protective mechanism. In bedside nursing there are many ways we can apply distance. For example, a nurse can stand in a doorway and carry on a very pleasant conversation with a patient. She does not need to lean over a bed to talk.

Visitors should be encouraged not to visit the first few days of the isotope administration. If they do visit, they should be advised to stay a short time and not to get too close to the patient. I believe it unwise to suggest that the family stay away completely during this time because the patient worries about family affairs, but it is also unwise for a family member to stay two hours in a patient's room, when 15 minutes would do as well.

Q. Nearly all these precautions, after all, are really applications of common sense, aren't they?

A. Yes. As I said previously, the nurse should find out the name of the isotope being administered, the kind of rays or particles it emits, and the half-life or decay rate. From this any good bedside nurse can design her own nursing care program for a particular patient.

Q. Miss Nelson, you are making this sound very simple. I would like to go back to the half-life or decay rate and find out how it applies to the discontinuance of precautions. You said that gamma rays are the same as high-voltage X-rays and that if the patient received gamma rays he was radioactive during the early part of his treatment. That means the shorter the half-life, the shorter the time of precautions, doesn't it.

A. Yes, and as an illustration let's take radioactive gold or Au^{198}, which has a half-life of three days. During the first three days of treatment the patient is more radioactive, the next three days, less radioactive—and so on.

Q. Then the nurse can discontinue her own precautions as time goes by?

A. Yes, and such discontinuance is based upon her

knowledge of the half-life of the isotope being used. You see, the atoms in a radioactive element all emit rays at a definite and steady rate until their energy is spent and they are no longer radioactive. This is the rate of decay or half-life, and it can vary from a few seconds or less to thousands of years. Each radioactive substance has a rate of decay characteristic of that specific isotope. For example, the radioactive isotope of iodine, I^{131}, has a half-life of eight days, whereas radium has a half-life of 1,590 years. Another isotope just coming to medical attention is carbon^{14}, which has a half-life of 5,000 years.

Q. In other words, radium is continuously radioactive?

A. When it is used in medical treatment of humans, yes. Its half-life is 1,590 years, or approximately 1,600 years. This means that if a hospital owns four grams of radium in 1959, one-half of it will disappear in 1,600 years, leaving only two grams. The calendar year might be 3559. Then 1,600 years later, in 5159, one-half of the two grams would remain.

Q. Then it decays by half of its quantity during its half-life period. So, if a doctor were to inject radioactive gold, which has a half-life of three days, into the thoracic cavity of a patient on March 1, half of its activity would be gone by March 4, one-quarter by March 7; one-eighth of its activity would remain by March 10, and only one-sixteenth of its former life would be left by March 13. Is that correct?

A. Exactly. Although it sounds complicated at first, it actually is fairly simple. Each isotope has a different rate of decay and each one must be looked at individually, but since only a few are used in medicine, it is not too difficult to learn.

Q. Miss Nelson, can you summarize the important isotopes used in medicine today?

A. First of all, only about three isotopes are used therapeutically today. They are iodine^{131} for thyroid disorders, phosphorus^{32} for blood disorders, and gold^{198} for cavity and soft tissue tumor work.

Iodine^{131} has a half-life of eight days and is given by mouth. It is a beta-emitter and a weak gamma-emitter, hence precautions are indicated for the first few days of treatment. Therapeutically it is expected to go to the iodine-selecting tissues of the body, and while it is there, to radiate any adjacent tissue. It is excreted in the urine and frequently this is collected in twenty-four-hour totals and sent to the radiation laboratory. The urine should be under radiation precautions.

Q. What about the linen and the dishes?

A. That depends. By touching something a patient cannot contaminate it unless the isotope is on his hands. The linen would only be contaminated if the patient were incontinent and the urine, containing the isotope, contaminated the linen.

Q. Do the same precautions apply to phosphorus^{32}?

A. No, they don't. Phosphorus is a beta-emitter only, and consequently there are usually no precautions used with patients. The half-life of phosphorus is about 14 days.

Q. What about the gold?

A. As I said previously, Au^{198} (radioactive gold) is injected into the cavities and soft tumor tissue and is both a beta- and gamma-emitter. Precautions are indicated for at least six days when about three-quarters of its life activity will have decayed. This is based on the half-life rate of approximately three days.

Q. Is the linen contaminated in this instance?

A. Again, as in iodine work, the linen is only contaminated if the isotope itself gets on it. Colloidal gold is beet red in color and if a nurse should see a beet-red stain on the patient's dressing at the site of inspection, she should leave it alone and call the doctor immediately. This dressing should be removed with very careful handling and taken immediately to the radiation department. The nurse should avoid getting her hands or uniform contaminated with the isotope. If she does, she should question the radiation department as to the best way to decontaminate them.

Q. Miss Nelson, if you were a nurse in an isolated area where a radiation department does not exist, what would you do about hands or a uniform contaminated by radioactive gold?

A. I would wash my hands under running water to remove as much of the isotope as possible. This is the same principle as the running-water scrub in medical asepsis. I would remove the uniform and set it aside (using the principles of time and distance) until the decay rate had caused the isotope to disappear. In relation to gold, fifteen-sixteenths would decay in two weeks, so at the end of about two weeks the uniform could be put into the regular laundry, with little danger to anyone. If one wished to wait another six days, sixty-three sixty-fourths would have disappeared, and to all events and purposes, this uniform could be considered safe.

Q. During the past few years, most nurses have seen and read articles in the public press discussing dangers of radiation, and these discussions nearly always include the medical use of radioactive isotopes and X-rays in treatment and diagnosis. Patients also have seen these articles and are concerned in varying degrees. They frequently turn to the nurse to ask her opinion. What can she say?

A. The nurse who has kept herself well informed by studying reliable sources will have little difficulty with such questions. The effect of radiation on tissues is generally in direct proportion to the radiation dose received by the body. Now, when a large amount of radiation is given to the whole body within a short period of time, as in nuclear explosion, the hazard is great and severe illness or death may occur.

When limited parts of the body are irradiated, as in medical irradiation therapy or diagnostic procedures, the situation is quite different and the hazards, side effects, and benefits all come into play and must be weighed carefully. Our physicians today know what they are doing when they use X-ray or radioactive isotopes for diagnosis or therapy. My personal feeling as a nurse is that if a patient is under the care of a reputable physician he has little to worry about and should follow his doctor's orders implicitly. Also, a good doctor knows the hazards involved and will protect both the patient and his family from dangerous situations.

Q. For some years radiation therapy was used in the treatment of benign tumors and other conditions. This is no longer so. Why?

A. Back in the 1920's such benign conditions as acne vulgaris, neuritis, dermatitis, and many others were treated by radiation therapy. Today there is a growing viewpoint that benign conditions should not be treated by radiation, which in itself is dangerous. I tend to believe that way myself and I believe that if one has cancer or some other such serious health problem it is very good to employ such a powerful means of controlling it. But for the benign problem, like acne vulgaris, there are many other acceptable ways of treating it; to resort to a method of treatment that in itself can cause harm seems to me unnecessary. It has been noted that treatment of these benign conditions by overzealous and enthusiastic therapists has resulted in radiation damage.

Q. We have been talking mainly about radiation in relation to hospital situations, but many patients with

(continued on page 33)

Mrs. Greenburg is the center of attraction as she shows the group of expectant parents how to hold the baby while bathing him.

CLASSES for Expectant Parents

Part II

by BETTY GREGORY GREENBURG, R.N., M.S.

Editor's Note: **Last month Mrs. Greenburg described a meeting of the mothers' group. Here, from her notes, is a report on a meeting of the mothers' and fathers' group.**

When the group assembled I asked what they would like to talk about. (Before class, Mr. F. had asked me if I had my walking shoes on.) Someone said we were going to tour the department. I said then that we should get started. I added that the labor and delivery areas were quite busy that evening, and suggested we visit a delivery room first while it was still unoccupied. Then we would visit a labor room, admitting room, the two types of rooms available after delivery, and the nursery. They all nodded agreement.

We walked in a leisurely manner to the delivery department. I led them past a group of several nurses and an intern who looked at us. I smiled but did not stop to make introductions because I felt that at the moment the mothers' and fathers' group were probably feeling quite tense, and it would have been embarrassing to them. (The head nurse in the delivery room knew we were visiting that evening.) One mother laughed and said, "Maybe they think we are customers." As we entered the delivery room, everyone looked around curiously but offered no comment. I allowed them a minute or so to look around and adjust themselves before I said anything. (It was not until we returned to the classroom after the tour that I learned a little of their initial reaction.) I asked them if it was somewhat like they had expected it to be. Mrs. K. said it wasn't, but she did not elaborate. "What did you expect?" I asked. She answered that she did not know.

As no one had said anything yet, I inquired whether there were any questions about anything they were looking at. Mr. R. broke the silence by asking, "What are these for?" He was tentatively fingering the leather bracelets attached to each side of the delivery table. Before I could say anything, someone said, "Probably to prevent you from getting in the way of the doctor." Another added, "They probably don't want you to touch anything." I said that was right and proceeded to explain briefly how they would be covered up on the table with various types of drapes so that only the birth passage showed.

Their eyes and interest continued to focus on the table, and Mr. R. asked if the table went forward, that is, if the head of it raised. I said Yes and proceeded to place the table in various positions by means of the crank. Next they asked about the stirrups, so I placed them in position and then commented on the possible adjustments that make it fit individual body builds. I showed how the straps went around ankles and knees to hold the legs in place. I tried to elicit how they felt about being strapped down. No one answered directly, but Mr. R. made a little joke by a gesture referring to a policeman's handcuffs.

I next showed how the table divided in half and where the patient's hips were placed on the edge of the table. Mr. F. said, "What's this for?" referring to the incubator for the baby. Mrs. K. said it looked like an incubator, and I said that was what it was. I opened the top and a few of those near by placed their hands inside, commenting as they did that it was warm. Mr. K. noticed the hand grip on one side of the table and asked what it was for. I said that if the doctor wanted, the patient could use this to hold onto and bear down (push) during delivery. They all nodded with approval at this.

While waiting for further comments or questions, I brought out an Ident-i-band, which was used to identify mother and baby. I demonstrated its use, and Mr. F. asked if footprints and fingerprints were taken. I said they were, and I showed them the record on which they were placed. His wife asked, "You are not so worried now about getting the wrong baby?" He laughed and said No. I said we were aware of the possibility and therefore checked every time the baby was taken to the mother to see that the number and name on her bracelet corresponded with the ones on the baby's. "And if it comes off the baby?" Mr. F. asked. I told him that new ones were then put on mother and baby.

We then left the delivery room and went to a labor room. They all looked around interestedly, as they had in delivery. Someone finally commented on how narrow the bed was. I showed how, after sedation was given, the side rails —part of each bed—were raised. This appeared to please them. I explained that when the mother was ready for delivery she was moved in her bed to the table. Mr. R. asked if anesthesia were given here or in the delivery room.

I explained that sometimes medi-

As Mrs. Greenburg supervises his technique, a nervous young father-to-be practices holding and burping the "new" baby. Dolls served as model children for the class.

cine to relax the patient was given in the labor room, but that medicine to help delivery of the baby was given in delivery. I showed the bathroom connecting each labor room. (When proceeding from delivery to there, I pointed out the stretcher used to convey the mother from delivery to her room and the platform underneath which carries her belongings.) Mr. R. asked what the floor lamp was, and I explained that it was a lamp. We then proceeded to the admitting room. Again everyone looked around, but they appeared more relaxed and gave the appearance of being more at home. I commented that it was in the admitting room that all the procedures we had talked about last time were done. Mr. K. looked in the bathroom and said something about a shower, but I said there was none there. He commented about the small lockers lining one side of the room, and I explained that this room had once been a doctors' dressing room but that we had converted it to its present use because the former room was so small you could not change your mind in it. They all laughed at that. Mr. R. examined the blood pressure apparatus standing near by and I said it was to take blood pressure, it was like the one used in the doctor's office, but on a standard.

For the Fathers

Next, we went to the fathers' waiting room, and Mr. R. made some joking comment about it. All made jokes about it, then. Mr. F. said the cigarette people were missing a good bet by not putting a cigarette-dispensing machine in the room.

Leaving there we visited the first of our two nurseries. I had previously asked the nurse in charge if she would bring a baby to the window when we appeared and this she did. The baby she chose was a cesarean-section baby, and she probably chose him because of his well-shaped head and general attractiveness. I explained that the blue identification cards on the cribs signified boy babies and the pink, girls. Mr. F. said he was going to come up and burn all pink cards. They spent some time just looking at the babies and commenting. I heard Mrs. F. say to her husband that for some reason cesarean babies were always prettier than the ones delivered the usual way. Also, something about this was so because they did not go through the birth process in the usual way. I explained that all babies were kept in this special nursery for eight hours after birth. Someone said, "Oh, that is to keep special watch over them?" I said that was right.

We went to a private room, then, which, judging from their comments, they thought very nice. I showed them how the whole bed could be lowered close to the floor for convenience of the patient in getting in and out. I demonstrated the use of the over-the-bed table for holding the food tray and showed the built-in mirror which Mrs. K. said could be used in applying make-up. I showed them the signal system and the red bell button for emergency in the bathroom. I also showed them the shower and explained they were available only in private rooms.

One of the group remarked that it was just like a hotel, and Mr. F. said it was a lot better than some he had been in. (I believe he was a salesman.) They all laughed at this. We went to a semiprivate room, and they seemed to like that, too. Mr. R. said it was nice to have someone to talk to, and I agreed. Mr. K. asked about room prices and the difference between the two types. I said that prices change and it might be a good idea to inquire in the office about that and other matters pertaining to pay before actually going to the hospital to have the baby. Mr. F. said he thought there was about $5 difference in room prices. He said that if you added the cost of telephone, radio, or TV, costs mounted. Mrs. R. then volunteered prices of two types of rooms. Mr. F. told the price of rooms in the hospital he had been confined in in Dallas. Next, we proceeded to the second nursery and stood looking in for a while. It was 15-20 minutes before the end of the session, so I said that if they would like to return to the meeting room, I would bring refreshments in.

When I returned I asked them if it had been what they expected and if they wanted to ask about anything. Mr. R. said it had been very interesting to see everything before actually going to the hospital. Someone else said that on first entering the delivery room he felt scared, but after seeing that there was a use for everything, felt much better. Mrs. K. said she felt this way, too. Mr. F., in answer to my first question, said everything appeared very functional, efficient, and well equipped. Someone else commented how clean everything looked.

Mrs. F. said something to her husband about "that question," and he said it was too late to get into a long discussion. I said perhaps next time we could talk about it. His wife then asked why the doctor didn't want anyone to gain too much. Time being short, I answered directly. I said there were two reasons: It would be easier, as a rule, to have the baby if one were not overweight, and the doctor was on the lookout for signs of toxemia. That was why each time she went to the doctor, her blood pressure was taken, the urine examined, and weight measured. Mr. F. asked if toxemia was the same as urinary poisoning, and I said sometimes kidneys were affected, that was the reason for examining the urine.

As it was the end of the period, I asked what they would like to talk about next time. Nobody said anything, and I reminded them that last time we had mentioned several topics. Finally, Mr. F. said something about handling the baby. This seemed satisfactory to the group, and I said perhaps it would be appropriate since we had talked about having the baby. We would next talk about taking care of the baby.

A personal feeling I had to struggle with was the need to give the groups all of the knowledge I thought they should have. I kept reminding myself that they would ask about what they were especially interested in. As it was, I was able to employ the leader's prerogative to add information as needed for better or more complete understanding.

At the end of the last class for each group, each member expressed his or her thanks for all they had gotten out of the meetings. They said that they felt they really knew what was going to happen during labor and delivery and how to care for the baby. Conducting sessions in this way has proven very challenging and interesting to me. Interesting, because one never knows just what will come up; challenging, because questions require analysis to ascertain the best way to handle them and thus give the best help one can. Moreover, the leader can learn all the time. Frequently I found myself musing silently, "Maybe it would have been better to have said this and so, or have done such and such . . . well, next time I can. . . ."

Advances and Trends in

DRUG THERAPY

by JOAN SARVAJIC, R.N.

Formerly Instructor in Pharmacology, Bellevue Schools of Nursing, New York City

Digitalis Intoxication

Although idiosyncrasy or hypersensitivity in response to digitalis therapy rarely occurs, digitalis toxicity has been a problem since the introduction of this drug. In last month's issue the present concepts concerning digitalis action and clinical indications for its use were summarized. This month attention will be focused on various aspects of digitalis intoxication, an important problem for both the physician prescribing the drug and the nurse administering it. The frequency and gravity of digitalis intoxication are not always widely appreciated, probably due to the lack of well-defined myocardial lesions resulting from toxic doses.

All therapeutically active digitalis preparations may produce toxicity. In fact, the absence of toxic properties in a digitalis preparation is evidence of the cardiotonic inertness of the preparation. The occurrence of toxicity bears no relation to the digitalis compound employed but is conditioned by the extent of failure, the underlying etiology of the failure, cardiac reserve, electrolyte balance, concurrent use of other drugs, and numerous other factors.

Anorexia, nausea, and vomiting are early manifestations and the most common subjective symptoms of digitalis overdosage; they appear whether the drug is administered orally or intravenously. The vomiting that occurs is of central rather than of peripheral origin.

About 25 per cent of patients with digitalis toxicity experience either visual symptoms or dizziness. The dizziness may be a true vertigo and force the ambulatory cardiac patient to become bedridden. The visual disturbances are characterized by blurring, dancing, or flickering dots and color aberrations.

Headache is fairly common and may be the only symptom to precede disturbances in cardiac rhythm. Unusual neurological symptoms have been observed in about 9 per cent of patients who have digitalis toxicity. These symptoms consist of pains in the lower third of the face resembling trigeminal neuralgia associated with typical neuralgic pains in the upper extremities, lower lumbar areas, and calves.

In patients receiving intravenous doses of the strophanthin derivatives, numbness and tingling of the lips, tip of nose, cheeks, and ears are frequently noted. In elderly patients and those with advanced congestive heart failure, symptoms affecting the central nervous system may predominate: lassitude, apathy, confusion, disorientation, delirium, stupor, aphasia, and at times psychotic behavior patterns.

Cardiac Disturbances

The most important toxic effect of digitalis is on the heart; every form of arrhythmia and conduction disturbance has been attributed to this drug. In the presence of severe myocardial damage, digitalis is considered to be a common cause of ventricular tachycardia, and is probably an occasional precipitant of advanced heart block. These extreme reactions indicate the toxic potential of digitalis both as a myocardial irritant and as a depressant. The interaction of these two effects makes possible the gamut of electrocardiographic deviations.

The depressant action of digitalis is mainly limited to the atrioventricular junctional tissue where the direct and indirect (vagal) actions of digitalis are synergistic.

Next to gastrointestinal symptoms, ventricular extrasystoles are the most common indications of overdosage. When digitalis is continued in their presence the ectopic beats assume the fixed pattern of bigeminy or coupling. The occurrence of bigeminal rhythm without digitalis overdosage generally indicates serious, frequently terminal, heart disease. Premature ventricular beats are expressions of congestive heart failure, inadequate coronary perfusion, and myocardial anoxia, with a consequent increase in ventricular irritability. Distinction between the two types of bigeminy is important: In one instance continued use of digitalis may produce fatal arrhythmias, and in the other it may prove corrective. It is also important to remember that death from digitalis may occur on maintenance therapy after profuse diuresis.

Generalized muscular weakness has been noted as a reaction to an overdose of digitalis. Prolonged digitalis maintenance has been implicated in gynecomastia occurring in elderly men with congestive heart failure. Since the digitalis glycosides structurally resemble the gonadal steroids, an estrogenic effect has been postulated.

The margin of safety with all digitalis preparations is limited. With any digitalis agent approximately 60 per cent of the toxic dose is required to achieve a therapeutic effect. In this respect digoxin, digitoxin, and lanatoside C offer no advantage over digitalis leaf. An exception may be gitalin, a water-soluble amorphous mixture of glycosides extractable from *Digitalis purpurea*. Batterman and co-workers claim only one-third of the toxic dose of gitalin is required for therapeutic effect. This, however, awaits further confirmation. With all digitalis compounds, toxic effects indicate a substantial percentage of the fatal dose has already been administered. With advancing congestive heart failure the margin between therapeutic and toxic effects decreases. In these patients, mercurial diuresis may be fatal.

Toxicity can be of prolonged duration, even after digitalis is discontinued. When nausea, vomiting, and extrasystoles appear it is usual practice to stop digitalis. If the symptoms persist unchanged after three or four days, the difficulties are attributed to severe cardiac failure rather than to digitalis.

Rising Incidence of Digitalis Intoxication

With the introduction of the purified glycosides it was expected that the incidence of digitalis intoxication would diminish. However, many recent reports indicate a mounting frequency of digitalis poisoning, and digitalis is becoming a significant factor in cardiac death. The increasing frequency of intoxication

is believed to be related to the current manner of digitalis usage and the changing methods in the management of patients with congestive heart failure.

With the purified glycosides, rapid intravenous digitalization has become common practice. Since digitalis intoxication more often follows intravenous medication, use of this route is not justified. A single-dose method for digitalization with digitoxin also presents a serious problem: While the practice may be of little hazard to the ambulatory cardiac patient with early failure, the dangers multiply for the patient with serious cardiac disability.

Another factor responsible for the increase in toxicity is the increase in life expectancy for the patient with heart disease. Thus there is the chance for development of more severe heart failure, and these extremely ill patients are more subject to digitalis toxicity.

Perhaps the most important reason for the rise in the incidence of digitalis intoxication is the increasing dependence of treatment on electrolyte manipulation. Restriction of salt ingestion and the administration of mercurial diuretics, ammonium chloride, cation-exchange resins, carbonic anhydrase inhibitors, and cortisone are becoming part of the therapy of failure. All these measures induce changes in electrolyte metabolism and may alter the threshold of the myocardium to digitalis intoxication.

Electrolytes and Digitalis

The classical studies of Ringer demonstrated the dependence of cardiac contraction on the electrolyte environment. In these early experiments it was learned that calcium and potassium ions were antagonistic in their effects on contraction. When the concentration of calcium in the perfusing medium was raised, a more vigorous systole ensued. When the concentration of potassium was raised, increased relaxation resulted in the absence of calcium, the effects of potassium prevailed, and the heart stopped beating in diastole. Increasing the concentration of calcium caused arrest of the heart in so-called calcium rigor.

The injection of calcium salts into human beings induces bradycardia, sinus arrhythmia, shifting pacemaker, various degrees of heart block, and multiple extrasystoles of large and unusual form. Furthermore, the toxic action of digitalis has been reported enhanced by calcium; it is possible that the failing heart may be more sensitive to the toxic action of calcium. The relation between calcium and digitalis in patients with heart disease remains to be explored.

Magnesium Salts

Magnesium salts depress the contractility of voluntary cardiac muscle. H[i]gh serum concentrations cause bradycardia, conduction disturbances, and eventually cardiac arrest. The capacity of magnesium to abolish digitalis intoxication has been demonstrated. The therapeutic use of magnesium for digitalis intoxication is limited by its transient action and by its occasional undesirable effects.

Potassium Cation

Of all the ionic alterations encountered in man, those due to potassium have the most pronounced effects on the heart. One of the properties that differentiates potassium from other cations is its high rate of mobility across cell membranes. This may be the basis for the critical role of potassium in muscular excitability and conductivity. The migration of potassium ions probably links the electric phenomenon of excitation with the biochemical process of energy release, essential for contraction.

A profound relation exists between digitalis and potassium, for digitalis affects the potassium concentration of the myocardial cell. There is general agreement that toxic doses of digitalis liberate potassium from heart muscle; it may be that liberation of cellular potassium is the result of the depletion of energy-rich phosphates occurring with digitalis overdosage. There is no agreement about the effects of therapeutic doses of digitalis on cellular potassium concentration. Some attribute the therapeutic action of digitalis to restoration of cellular potassium and improved cellular hydration. The resemblance between digitalis and adrenal steroids in chemical structure also suggests the possibility that digitalis maintains potassium within the cell.

Conversely, changes in potassium concentration influence the action of digitalis. Potassium is promptly effective against many of the arrhythmias produced by digitalis, and it is also reported that potassium salts eliminate symptoms of overdosage and rapidly promote a sense of well-being in patients with digitalis poisoning.

Potassium Metabolism in Heart Failure

In heart failure the excretion of sodium is impaired, and although the total body sodium is significantly increased, the serum concentration is moderately lowered. The hyponatremia is not only the result of dilution but probably involves intracellular shifts of sodium. The serum potassium level remains normal, the chloride concentration is slightly increased, with a tendency to acidosis.

There is evidence that during the development of failure the body loses potassium. Administration of large quantities of sodium and potassium salts to patients with heart failure results in potassium retention without weight gain. A positive potassium balance has been observed in patients recovering from failure. Measurements of exchangeable potassium carried out with the radioactive isotope dilution technique showed a reduction in total body potassium in heart failure; this occurred even though extracellular fluid was absolutely increased and the serum potassium level remained normal. These facts imply internal body electrolyte shifts involving both the extracellular and intracellular components. Disturbances in concentration and distribution of the major cellular cation, potassium, are associated with evolution of congestive heart failure.

According to Calhoun, *et al,* in patients dying with isolated right-sided failure potassium was low in the right ventricular muscle, but not in the left one. The opposite was true when failure was limited to the left ventricle. When both ventricles failed, there was uniform diminution in muscle potassium.

Many factors contribute to the liberation of potassium from heart muscle in failure. Anoxia, acidosis, edema, and prolonged exercise are known to induce potassium loss. Overwork has been held responsible for the release of cellular potassium, and is believed to predispose the patient to muscular fatigue and failure.

Today's therapy contributes to the deranged electrolyte picture, with low-salt diets and diuretics the chief factors disturbing electrolyte equilibrium. The composition of the diuretic urine and the lack of change in serum sodium and potassium levels indicate that potassium leaves while sodium enters the cellular compartment.

The prolonged administration of ammonium chloride also results in potassium depletion. Cation-exchange resins, originally introduced to remove sodium from the body, have a greater affinity for potassium than sodium, and unless a potassium cycle resin is incorporated in the mixture or adequate potassium is provided, serious deficits occur. Diamox, another commonly used diuretic, causes urinary excretion of potassium.

Thus in patients with heart failure the underlying pathologic process and the therapeutic regimen for its management constitute the two general categories of factors that deplete both cellular and myocardial potassium. It is not known to what extent potassium depletion contributes to the biochemical lesion and aggravates the clinical state of congestive failure. It has been demonstrated that the loss of potassium significantly affects the body's threshold to the toxic action of digitalis and may be an important cause in the rising incidence of digitalis toxicity.

Evidence that potassium loss from the body may precipitate digitalis intoxication was first gained in a study of the postmercurial redigitalization phenomenon. From 24 to 48 hours after diuresis a digitalized patient may experience nausea, vomiting, giddiness, headache, and considerable weakness. Electrocardiograms may demonstrate any of the changes that occur with an overdose of digitalis. The mobilization of digitalis-containing edema has been implicated as the mechanism. Although it is the prevailing view explaining the onset of symptoms and signs of digitalis overdosage after diuresis, this view has recently been questioned. If the explanation is valid, then the administration of an extra amount of digitalis without any diuretics to patients who tend to develop the syndrome should precipitate toxicity. When a dose of digitalis equivalent to the maximum amount presumed mobilized is given, no toxicity follows.

In addition, if digitalis-laden edema is the causative factor, the onset of the syndrome should relate to the magnitude of the diuresis. Experiments indicate that even massive diuresis could

(*continued on page* 33)

MAGNESIUM SULFATE — CATION

DESCRIPTION: Magnesium sulfate is a water-soluble crystalline salt. The ion magnesium is of considerable importance physiologically and pharmacologically.

ACTION AND EFFECTS: Magnesium ion is indispensable to life; it is apparently essential for the functional integrity of the neuromuscular system. In high concentrations magnesium ion is a central nervous system and neuromuscular depressant.

There is evidence that magnesium affects the activity of numerous enzyme systems, producing such substances as adenosinetriphosphatase, cholinesterase, and choline-acetylase. Many theories have been advanced to explain the numerous pharmacological actions of magnesium on an enzymatic basis, but these theories are still inadequate to explain the many pharmacological properties of the ion.

Parenteral administration of large amounts of magnesium salts results in marked depression, affecting both the central nervous system and the peripheral neuromuscular junction.

Peripherally, magnesium has a curare-like action: The excitation of skeletal muscle by nerve impulses is impaired. Magnesium also produces a true depression of the central nervous system. The central depression and peripheral transmission defects produced by the magnesium ion can be completely antagonized by calcium.

The myocardium is much less sensitive to magnesium than is the nervous system, therefore no depression of the myocardium occurs at concentrations employed clinically. Although magnesium in tolerated doses produces only minor changes in the human electrocardiogram, there is clinical evidence that the ion may depress the production of impulses in ectopic centers. Magnesium salts are effective in the treatment of paroxysmal tachycardia and can abolish the extrasystoles caused by full digitalization.

Magnesium acts peripherally on the vascular system to cause vasodilatation; it can also produce a weak antispasmodic action on the intestinal musculature and sphincter of Oddi.

USES: Magnesium salts have been used extensively in therapeutics but the validity of many of the applications of this ion can be seriously questioned.

Magnesium sulfate has been used as a cholagogue, especially in chronic cholecystitis and catarrhal jaundice. Hypertonic magnesium sulfate solution in the intestine increases the flow of bile into the duodenum, probably merely by relaxing the sphincter of the common bile duct.

Magnesium sulfate has been used as a central nervous system depressant, especially in convulsive syndromes. It is used in eclampsia and tetanus; intrathecal magnesium has been employed in the management of tabetic crisis. Magnesium is capable of augmenting the action of general anesthetics and morphine, and it has been employed in obstetrical anesthesia.

The intravenous use of magnesium sulfate is worthy of trial in the treatment of paroxysmal ventricular tachycardia if simple measures have failed and there is no evidence of marked myocardial damage.

Magnesium sulfate intravenously is used as a uterine antispasmodic agent.

PREPARATIONS: Magnesium sulfate is marketed as a 25 per cent solution for parenteral administration.

DOSAGE AND ADMINISTRATION: As a central nervous system depressant for children, magnesium sulfate is used intravenously in a dose of 0.1 to 0.2 ml. per kg. of a 25 per cent solution. In tetanus the subcutaneous or intramuscular injection of 2 ml. of a 25 per cent solution per 20 pounds of body weight is utilized. Intravenously magnesium sulfate may be used in 6 per cent solution at a rate not exceeding 3 ml. per minute. This dose is effective for approximately 30 minutes.

For long sustained action, the drug may be given intrathecally in a dose of 1 ml. of 25 per cent solution for every 20 pounds of body weight.

In cardiac arrhythmias the effective dose is 20 ml. of a 20 per cent solution.

TOXICITY: Magnesium toxicity causes symptoms of central nervous system depression—the blood pressure falls and death results from respiratory paralysis.

PRECAUTIONS: When toxicity occurs, artificial respiration should be administered until calcium salts can be injected intravenously to antagonize magnesium.

CALCIUM GLUCONATE — CATION

DESCRIPTION: Calcium gluconate, a white crystalline or granular powder is odorless, tasteless, and soluble 1:5 in boiling water. The drug contains 9 per cent calcium.

ACTION AND EFFECTS: A moderate excess of extracellular calcium has little effect on the functions of the nervous system, but a reduction in ionized calcium leads to a serious physiological disturbance known as low-calcium tetany. Cardiac muscle likewise is affected and arrhythmias occur.

Calcium deficiency apparently affects various portions of the cerebrospinal axis as well as the neuromuscular junction. Futhermore, all types of synaptic transmission are dependent on adequate calcium levels.

The cardiac action of calcium in some ways resembles that of digitalis, which has raised the practical point of whether it is safe to administer calcium intravenously to digitalized patients.

Calcium and potassium are antagonistic in their action on heart muscle, and it is believed that this antagonism is due to the displacement of one cation by the other at a critical concentration ration. An excess of calcium causes systolic arrest, so-called calcium rigor.

Calcium can potentiate the effects of oxytocic drugs.

USES: Calcium gluconate may be used in the immediate treatment of low-calcium tetany, regardless of etiology.

Since clinical reports suggest that the calcium ion exerts an antispasmodic action on smooth muscle, calcium gluconate has been successfully used in the treatment of intestinal, ureteral, and gall bladder colic. The drug is also effective in relieving the abdominal pain, diarrhea, and tenesmus of intestinal tuberculosis.

PREPARATIONS: The drug, marketed as calcium gluconate injection, U.S.P., is administered slowly in a 10 per cent solution, a strength also used for intramuscular injection.

DOSAGE AND ADMINISTRATION: In low-calcium tetany, 20 ml. of 10 per cent calcium gluconate is injected slowly by the intravenous route. Comparable dosages are used to obtain the drug's antispasmodic action. Calcium gluconate is also used in the presence of impending cardiac standstill, as in potassium intoxication.

TOXICITY: A moderate excess of extracellular calcium has little effect on the nervous system, but high concentrations of calcium block ganglionic transmission and neuromuscular junctions.

The first cardiac effects of the injection of calcium resemble those of vagal stimulation, consisting of bradycardia, sinus arrhythmia, shifting pacemaker, and various degrees of heart block. Higher concentrations may stimulate the ventricular musculature and produce foci of idopathic ventricular rhythm and large, unusually formed ventricular extrasystoles.

PRECAUTIONS: Although much lower in calcium content than chloride, calcium gluconate has the marked advantage of being nonirritating to either the subcutaneous tissues or the gastrointestinal tract. The intramuscular tract should not, however, be employed in infants because abscess formation at the site of injection may result.

KAON ELIXIR — POTASSIUM PREPARATION

DESCRIPTION: Kaon Elixir is a liquid potassium preparation. Each five cubic centimeters of the drug supplies 250 mg. or 6.4 milliequivalents of elemental potassium gluconate; it is equivalent in elemental potassium to 0.5 Gm. of potassium chloride.

ACTION AND EFFECTS: Losses of potassium, regardless of the cause, potentiate the toxic action of digitalis. Symptoms and signs of such loss may be controlled by oral potassium supplementation. Marked disturbances of cardiac rhythm may result from small doses of digitalis when patients have sustained chronic potassium depletion through either the renal or gastrointestinal route, and in these patients—especially when the serum potassium level is depressed—even small amounts of digitalis can prove fatal.

It has been postulated that the high rate of mobility of potassium across cell membranes may be the basis for the critical role potassium plays in muscular excitability and conductivity. According to this theory the migration of potassium ions probably links the electric phenomenon of excitation with the biochemical process of energy release essential for contraction.

USES: Kaon is a form of oral potassium therapy, useful with modern diuretics and corticosteroid hormones in replacing excretory potassium losses. The preparation is palatable and well tolerated in therapeutic dosage, without gastrointestinal disturbance. A sugar-free preparation, it is used with digitalis to reduce toxicity and to treat digitalis toxicity.

PREPARATIONS: Kaon Elixir is marketed as a liquid in pints and gallons.

DOSAGE AND ADMINISTRATION: The adult dosage of Kaon Elixir is one tablespoonful or 15 cc., twice daily after meals. This supplies the approximate normal adult daily potassium requirement. The dose may in some instances be as high as 30 cc.

TOXICITY: When renal function is normal it is difficult to produce potassium intoxication by oral administration of potassium salts. The exceedingly large doses that would be required are not tolerated by the gastrointestinal tract, and pylorospasm and vomiting preclude the possibility of adequate absorption.

However, potassium intoxication can occur when the rate of intestinal absorption, parenteral administration, or endogenous accumulation of the ion in the extracellular fluid exceeds the rate of renal excretion.

The characteristic sequence of changes in the electrocardiogram occurs and death results in cardiac standstill. Preterminal phenomena include muscular weakness and paralysis; paresthesias in the hands and feet have also been described. Although a presumptive diagnosis of potassium intoxication can be made on the basis of characteristic changes in the ECG, an unequivocal diagnosis depends upon the determination of the plasma level of potassium.

PRECAUTIONS: Inasmuch as potassium intoxication is most frequently the result of anuria, treatment is futile unless there is reason to believe that the underlying renal defect can be repaired. Under such circumstances, or in the event that intoxication has resulted from excessive dosage, certain measures may be employed to forestall cardiac standstill.

The intravenous administration of a calcium salt may exert a temporary salutary effect on the myocardium, due to the physiological antagonism of the two ions. The injection of glucose and insulin to produce a rapid deposition of potassium and glycogen in the liver is another suggested procedure, but is a very temporary measure since subsequent glycogenolysis returns the potassium to an extracellular site.

One of the most effective procedures for reducing the level of extracellular potassium is the oral administration of a cation-exchange resin. Finally, potassium can be removed by the use of the artificial kidney.

MERCAPTOMERIN SODIUM — DIURETIC

DESCRIPTION: Mercaptomerin sodium is also known as thiomerin sodium and is the only organic mercurial diuretic not marketed in combination with theophylline. In this compound mercury is linked to sulfur.

ACTION AND EFFECTS: The primary action of the mercurial diuretics is to depress tubular mechanisms responsible for the active reabsorptive transport of certain ions.

The advantage of organic mercurials over inorganic mercurials lies in the fact that they are largely and rapidly excreted by the kidney, and their low dissociability permits control of the degree to which renal reabsorptive capacity is reduced.

In this way it is possible to produce functional changes in the renal tubule with minimal danger of producing the anatomical lesions in the kidney or elsewhere characteristic of poisoning by the mercuric ion.

The biological actions of the mercuric ion and of organic mercurials have been ascribed to their ability to inhibit SH (sulfhydryl)-activated enzyme systems, presumably by the formation of mercaptans. SH-activated enzyme systems are essential to provide energy for renal tubular transport.

USES: The main use of the mercurial diuretics is in cardiac edema. Good results with these drugs are sometimes obtained in chronic nephrosis, the nephrotic stage of glomerulonephritis, and ascites due to liver cirrhosis or portal obstruction.

PREPARATIONS: Mercaptomerin is not as stable as other organic mercurials. It is marketed in powder form in vials containing 1.4 or 4.2 Gr. When made up with 10 or 30 ml. of sterile water, a solution is obtained in which each milliliter contains 0.13 Gm. of mercaptomerin, equivalent to 43 mg. of mercury.

DOSAGE AND ADMINISTRATION: The usual dose of mercaptomerin is 1 to 2 ml. of the prepared solution. Comparatively little dissociation occurs locally so that tissue reaction at the site of injection is minimal, and the drug is therefore tolerated by the subcutaneous route. Moreover, when given intravenously it is much less toxic to the myocardium than are other organic preparations. However, the potency of mercaptomerin is just as good as for other mercurials.

TOXICITY: The classical symptoms of systemic mercurial poisoning may follow the injudicious use of mercurial diuretics. The symptoms are apt to appear when a mercurial is given to an individual having inadequate renal function; here the diuretic's excretion is impaired. They may also appear following too-frequent or too-prolonged oral administration.

Excessive use of mercurial diuretics may result in depletion of extracellular electrolytes. Weakness, somnolence, muscle pains, and even shock may result. This syndrome is not limited to the mercurial compounds but may occur when any diuretic regimen is pushed to an extreme, especially when salt intake is rigidly restricted.

PRECAUTIONS: In rare instances the diuretic response to mercurials is so marked that anhydremia develops and the hematocrit and the viscosity of the blood rise. In elderly individuals this may give rise to thromboembolic complications, including cerebral thrombosis.

An unusual type of secondary toxic reaction to mercurials has been reported in individuals with poor bladder functions. The marked distention of the bladder as the result of diuresis may lead to further asthenia of the bladder wall and acute urinary retention.

The rapid mobilization of edema fluid may result in excessive loss of potassium and the signs and symptoms of digitalis intoxication.

The author has discovered that when supervisory personnel keep a record of favorable comments on their staffs' abilities and actions, employee morale is high and patient care is improved.

A Little White Book

by **FREIDA L. MITCHELL, R.N.**
Psychiatric Charge Nurse, Patton State Hospital, San Bernardino, Calif.

THERE was tension in the office of the geriatrics unit of a large general hospital. The night nurse and her staff had just 15 minutes to wait before going off duty, and the day nurses and nurses' aides had begun arriving to relieve them. An unusual hush prevailed as the members of both shifts sat or stood in various attitudes of expectancy.

A young and inexperienced staff nurse on the night shift, I observed the situation with increasing interest. Each face mirrored the questioning thoughts of the others. I knew they were all concerned about the same circumstance: A new supervisory nurse was coming on duty that morning.

The expressions on the faces of the staff members revealed the questions in their minds:

What would she be like?

Would she smile and greet them with friendliness or would she be cold and formal?

Would she be lax and inefficient or would she run the unit with calmness and knowledge?

Would she rigidly "follow the book," trying to adhere strictly to the theories she had learned in the classroom, or would she be governed by the exigencies of the situation, giving a little here, tightening a little there?

Would she be the note-writing type, leaving orders tacked up in conspicuous places, or would she inspire her workers to peak efficiency without such reminders?

Would she be snobbish, imbued with a sense of her own importance, or would she humbly accept the help and cooperation a well-trained staff could give?

Finally, would she be a tyrant and faultfinder or would she be a teacher, giving credit where due?

These questions had all been asked and discussed by the unit personnel when they learned that a new nurse was to replace their well-loved supervisor. Some knew they wouldn't like her because they had heard reports from employees in other departments, while others knew that they would like her because they had friends who had worked with her in perfect harmony. Regardless of their feelings, some snap judgments would be made, right or wrong, and some judgments would be deferred until after a suitable trial period had elapsed. At any rate, the new day supervisor would encounter her first test that morning.

While we waited there with our eyes on the door, we finally realized that even if she entered then, greetings and judgments would have to be postponed. Patient rounds would have to be made, for it was nearly 7:00 A.M., departure time for the night staff. Just then a thumping noise came from down the hall and the night supervisor looked at me significantly.

"Van, will you please go and see if Mr. J. is out of bed again?" she asked.

I hurried from the office to find that the noise had been caused by Mr. J., who was tottering about in his room. I talked him into going back to bed and was steadying him on the step-stool when I heard murmuring voices in the hall. The night nurse and the new day supervisor were making rounds. I hurriedly tied Mr. J.'s restraint. Because his hips were slender, the elderly patient had slipped out of the soft tie around his waist. To draw it tighter would have been to make him uncomfortable. This was not the first time he had wriggled free, and every time he did so, he ran the risk of a fall and serious injury. I spoke to him in some exasperation.

"Mr. J.," I said, "I'm going to have to tie your hands and feet if you keep getting up."

"No, you won't! And you are not to threaten patients!" I heard.

I looked up in surprise at the new supervisor who was looking sternly at me. She turned abruptly and walked down the hall with the night nurse. I followed them in wordless embarrassment and we entered the office. No one had left it. All eyes sought those of the new nurse, lips forming smiles and minds ready to accept or reject. "Good morning," the supervisor said to the room at large. Glancing at me she warned, "Be careful what you say to patients." She looked from face to face as she went on speaking: "I keep a Little Black Book, you know, where I write down everything I don't like."

At this smiles froze and a barely perceptible gasp was heard. There was a rustle and stir as the night people picked up their wraps and the women of the day force donned their caps. There was a general exodus through the office door, and the new supervisor was left alone.

I walked across the hall to the elevator with the night nurse. As we waited for the doors to open we heard rapid footsteps behind us, and turning, we saw the frowning face of one of the day employees. As the woman hurried toward the diet kitchen, we distinctly heard her mutter, "Why not a Little White Book, for a change?"

All this happened when I was still a young nurse, not many years out of training, but I have not forgotten, nor will I ever forget, the words muttered by that nurse.

My experience has been varied throughout the years: I have worked in small hospitals and large; I have worked with nurses' aides, vocational nurses, psychiatric technicians, and other registered nurses. During World War II, I was an X-ray technician at San Bernardino Army Air Base civilian dispensary, working with enlisted personnel who had never seen a darkroom. Regardless of who my workers were, how much or how little they knew, I found the Little White Book an invaluable aid to good employee morale and efficient patient care. In such a book the favorable comments, abilities, improvements, and special aptitudes can be noted for future reference.

In Their Minds

I have been a nurse at Patton State Hospital for nearly five years now, and though the Black Book has not been in evidence here, I know many of the supervisory personnel who, I am certain, keep Little White Books in their minds, if not on their desks. The White Book needn't be a tangible thing, with writing that can be effaced and pages that can be torn, but it should at least be a part of a person's thinking. I have learned that much more can be accomplished with a few words of encouragement and deserved praise than with a book filled with judgments and criticisms.

THE DYNAMICS OF HUMAN RELATIONSHIPS

Let's talk it over

by **THERESA G. MULLER, R.N.**
Director of Nurses, Sheppard and Enoch Pratt Hospital, Towson, Md.

SOME of our previous discussions have pointed to present-day cultural influences affecting the current outlook on nursing. Significant among these is the new look at the value of the older person. It seems as though our progressively increasing population includes a greater proportion of members over 65 years of age. As a consequence of our maturing society we must necessarily change our thinking about patterns in nursing programs and practices heretofore established for a young person in a relatively young profession.

In this connection I recall a recent visit with friends where the head of the household, a lawyer of 72, maintained undiminished activity as an important member of a law firm. In answer to my query about the possible date of his retirement he indicated an indefinite time and spoke warmly about the value his profession placed upon the wisdom of its senior members.

Then I wondered about ourselves in nursing. Are we giving enough consideration to similar values? A report on a nursing conference held about 10 years ago placed considerable emphasis on the value of the contributions made by the conferees because all of them were under 35 years of age. Would this be acknowledged in the same way today? If so, might this then be considered a good example of the perpetuation of a stereotype?

We now find that nursing as a career might profitably start for the woman over 35. Half of the young women in this country are married by the time they are 20 years old and are having families during the years that applicants for nursing are customarily accepted. Because such women have decreased responsibilities in later years, at that time there is a great potential for the beginning of a career unless the doors are kept as closed as they have been in the past. If not, what further implications are there in accepting an older candidate for nursing and in providing for the preparation of nurses to care for the increasing number of aged in our culture?

During the twenty-year interval between 1936 and 1956 the number of persons over 65 years of age in this country increased from six and a half million to 15 million. Significantly, we also find that current practices and community customs no longer generally depreciate the elderly as much as in the past. By encouraging them to partake in constructive activities according to their individual capabilities, we are likely to find an increasing number of older persons living up to an expectation of usefulness, thereby retaining much of their buoyancy and health potential. A recent authoritative source brings to our attention that:

> Most of our abilities—strength, learning capacity, emotional stability, and so on—increase most rapidly through childhood and usually reach a peak somewhere in the twenties or thirties. Then some, like strength and agility, start to decline. Others, like learning capacity and memory, decline much more slowly. Many people of very advanced years have lost little or none of these abilities; in maturity of judgment and tolerance, they may continue to gain.[1]

Almost a hundred years ago, Robert Browning wrote a poem on creative maturity, which was inspired by the writings of a distinguished, learned man who lived seven centuries before. Although the opening lines of "Rabbi Ben Ezra" are well known, we might here profitably give further thought to their present significance:

> Grow old along with me!
> The best is yet to be,
> The last of life, for which the first was made:

How different is today's connotation of "The last of life" from that of Browning's time? We are told that a life span was scarcely half that of the average American who today lives to be more than 70 years old. An advance of 10 more years was expected at the beginning of this century, and thereby established a chronological age of 45 as the peak of a productive life. In our own times, 20 additional fruitful years are anticipated. However, we also realize how an increasingly large number of elderly people enter into relative inactivity beyond retirement and thus unnecessarily negate the fulfillment of the promise "The best is yet to be."

The available facts on an increased life span, which now set the middle-age period up to at least the 65th year, establish a different perspective from the one I viewed as a young nurse in the early 1920's. Twenty productive years in nursing had been held out to me as a possible attainment by the age of 45.

This view was further corroborated by my mother's approach toward the declining years, which began in her middle forties, and by my definitely aged grandmother who was in her early sixties. It will then be quite understandable that I should have considered somewhat ridiculous a suggestion to start a college education at 30. But I did. After the first year, several more went by during which I combined work with part-time education until the first academic-degree hurdle was reached. Then another year in full-time education to accomplish the second academic de-

gree. Circumstances again made it possible to relate my work with education, but not long enough to achieve the final academic measure of it. It is significant that by that time I had reached the age previously established for the beginning of my decline. However, subsequent productive years now seem unendingly caught in the spirit of our times which is conducive to a continuing quest toward an ageless creative maturity.

As I ponder on the fortunate misdirection of my expectations of an early retirement from work, I am reminded of the counteracting influences stemming from the association I had with an elderly patient in her home. Mrs. Robb was almost 80 years old when I, at the age of 27, undertook to care for that agitated, disoriented person. The toxic basis of her behavior was removed through nursing measures involving good nutrition, elimination, and sleep. Here Browning's injunction comes to mind: "Nor soul helps flesh more, now, than flesh helps soul!" I was fascinated by the tremendous mental vitality which was released when the toxic barriers were removed. Her intellectual treasures were apparently undimmed by advancing years.

Within a month after the elimination of toxic symptoms, Mrs. Robb was active in supervising her garden of colorful annuals and perennials, which daily provided an abundance of freshly cut flowers not only for her own enjoyment but also for patients in near-by hospital rooms. Sunday afternoon reading discussions were reactivated with a group of adults who had missed these sessions during her illness. Several times a week afternoon tea was a special occasion enjoyed with small groups of adolescent girls enrolled in the private school founded by her daughter. A memorable week at the Cosmopolitan Club in New York City gave me further opportunity to experience the fascination of Mrs. Robb's mature mind during visits with clergymen, writers, teachers, and others.

In the light of relatively recent criteria, I am now able to appreciate our respective approximations on the measures of maturity. Mrs. Robb was almost three times my age, yet fully accepted my authority as a nurse and wrote to her doctor, "I am indebted to you for an admirable nurse who is effective in carrying out your orders and thereby earns my respect." I, in turn, frankly appreciated the association with a woman of great charm which stemmed from a lifetime of pursuits in cultural areas related to my own professional bent in the study of the foundations of human behavior.

Technical preparation in nursing had never engulfed me to the exclusion of interests in literature, psychology, and philosophy, which, in my estimation, portray people and human relations more truly than some academic courses of study set up to do so. My association with Mrs. Robb, founded on mutual respect and appreciation of differences in age and background, generated an incentive for Mrs. Robb to share her creative talents in a variety of ways and widened my own outlook on aging processes as evolving dimensions in living.

As I followed Mrs. Robb's injunction to advance in achieving "a mind stored with good things," I learned that academic packages do not ensure attainment of wisdom. Furthermore, satisfactory progression toward creative maturity tends to be blocked by two main forms of self-defense against exposing our inferiorities. These are generally expressed by all-knowing attitudes and ready protestations against another's view when it is not readily grasped.

Young nurses today have information on the subject of old age which was not available to me when faced with the nursing care of Mrs. Robb.[2] But I do not consider their task simplified. It takes considerable maturity to sift the pertinent facts as they apply to a particular person and situation. For example, what does it mean to acknowledge that anyone of us can learn during the middle or later years the same kinds of things that could have been learned during our teens or early twenties? In this connection, George Sand also commented that old age is not a downward slope, but, with advancing years, brain work comes as easily as physical exertion to a child.

Our clarification of these viewpoints necessarily leads us to consider further how reduced speed assures greater accuracy in learning—but only when the amount of time used by any person is also measured against the sensory acuity of that person. Here the physiological processes of aging may be accelerated at the age of 30 or retarded at the age of 90. These variations reside in the individual characteristics which stem from the inherited predispositions of a person. They are shaped by the degrees of acquired disabilities arising from disease, nutritional deprivations, and faulty outlook on life.

Senescence seems to be delayed by appropriate activity of body and mind in making adaptations, thereby strengthening integrating apparatus to be alert and resilient. A wise use of psychological influences keeps mental, moral, and intellectual tissues healthy and thus prevents the early deterioration of the self-indulgent. Although simple neural connections in the brain are formed early in life, even more important associative connections are made in later life. The unproductive brain seems to be largely the result of disuse, of following the easiest way of life. Patient and continuous effort and diligent self-discipline improve brain capacity throughout the entire span of life in relation to the efforts exerted to develop one's individual potentials for creative maturity.

Creative maturity is noted in the elderly person who accepts the aging process with equanimity and is consciously working toward continuing growth in self-fulfillment. Physical comforts are then not nearly so important as emotional satisfactions. The young nurse who is able to accept and adapt to the slower tempo of an elderly patient has achieved this measure of emotional maturity. All of us, young and old, are faced with the need to respect the inspirational values of working toward a well-defined goal which differs from a prevailing or individual idea of what this goal should be.

An ever changing measure of creative maturity then stems from an evolving personality. However, development may be arrested in the course of unbearable crises at any time in life. This may be noted by the way a person reacts when confronted by the need to make a choice. An immature person wants a rigid formula as a guide while a mature person sifts out the appropriate elements in a current situation and from his life experiences creates his own formulation.

It seems that older persons live up to our expectations of them. Thus, they are likely to be less capable of sustained effort and to have unreliable memories when this is anticipated. On the other hand, positive expectations will encourage latent potentialities to come to light after a lifetime spent in meeting obligations in caring for older family members, bringing up children, and being submerged in financial needs. When the obstructions are removed, a person is then free to live and continue to go forward in creative maturity.

References

[1]*Looking Forward to the Later Years*, United States Government Printing Office, Washingtion 25, D.C., 1953, p. 1.

[2]*References on Aging for Health Personnel*, Periodicals, Government reports, Division of Special Health Services, Washington 25, D.C., 1957.

Publications on Aging, Selected Reports of Federal Agencies, Washington 25, D.C., 1956.

N.L.N. Convention

(continued from page 9)

urers of state and local leagues.

"Mobilizing Resources for Education for Nursing in Senior Colleges and Universities" will be the subject of a discussion at the Thursday morning meeting of the Department of Baccalaureate and Higher Degree Programs. Two Ohio State University educators—Ronald Thompson, dean of special services, and Frieda Stewart, assistant professor in the School of Nursing—will speak at the meeting.

In the afternoon this group will hold a joint meeting with the Department of Diploma and Associate Degree Programs on the subject, "Baccalaureate and Higher Degree Education in Nursing—Are Graduates Meeting Present-Day Needs?"

Speakers at this meeting will be John S. Millis, president of Western Reserve University, Cleveland, Ohio; and Mrs. Lulu Wolf Hassenplug, dean of the School of Nursing of the University of California at Los Angeles.

Panel participants will include Bernice Szukalla, director of nursing, University of Kansas Medical Center Hospital, Kansas City, Kan.; and Ruth Sleeper, director, nursing service and School of Nursing, Massachusetts General Hospital, Boston. Moderator will be Mildred E. Newton, director of the School of Nursing at Ohio State University.

A joint session of the Department of Hospital Nursing and the Department of Public Health Nursing will be concerned with staphylococcic infections. During this meeting, to be held between 12:30 and 1:45 P.M., the topic under discussion will be "The Role of the Nurse on the Hospital's Infections Committee."

There will be business meetings Thursday for the Department of Hospital Nursing and the Department of Baccalaureate and Higher Degree Programs.

Banquet

William J. Bishop, English librarian and medical historian on the staff of the Florence Nightingale International Foundation, will be guest speaker at the N.L.N.'s banquet Thursday evening. His talk will anticipate the 100th anniversary of the founding of the first Nightingale nursing school at St. Thomas' Hospital, London, in 1860. (An exhibit of Nightingaliana will be held at the Museum of the University of Pennsylvania from Tuesday to Friday.)

On Friday, the final day of the convention, a panel led by Martin P. Chworosky, director of the Albert M. Greenfield Center of Human Relations, University of Pennsylvania, Philadelphia, will discuss "Releasing Human Resources."

Panel members will be Mrs. G. Mennen Williams, member of the N.L.N. Committee on Community Participation, Lansing, Mich.; Sister Charles Marie, dean, School of Nursing Education, Catholic University of America, Washington, D.C.; and Eli Ginsberg, director, Conservation of Human Resources Project, Columbia University, New York City.

Friday afternoon there will be the closing business meeting, announcement of election results, and approval of resolutions.

Although some meetings are limited to N.L.N. members, many are open to nonmembers, including nonprofessionals. Registration for the convention will start Sunday, May 10, at noon. For N.L.N. members the registration fee is $8 for the full week of meetings, $3 for each individual day of meetings; nonmembers pay $10 for the week, $5 for daily meetings.

Lavonne M. Frey is chairman of the General Program Committee for the convention.

Further information about the convention meetings and hotel reservations may be obtained from the National League for Nursing, 10 Columbus Circle, New York 19, N. Y.

Three-Dimensional Problem

(continued from page 11)

a solid scientific background which will enable him to understand these relationships.

This does not imply that the science teacher should not, on occasion, point out the practical value of facts presented in lectures and laboratory work. If, however, too much of this is done, the student will soon develop a feeling that the teacher is trying to sweeten a bitter pill. As a result, she will overemphasize the practical applications at the expense of the basic facts. The best results with professional nursing students, I believe, are obtained when one presents the basic concepts and fundamental knowledge in the preclinical course as being important and interesting in their own right, even though this may not be immediately apparent to the student.

The increasing competence of clinical nursing faculties in applying the fundamental principles of the basic sciences makes the integration of basic sciences involved in bedside nursing an important part of the learning experience. Here, at the patient's bedside the clinical instructor of nursing and student can integrate the information. The remaining years of the program should consist of one continuous integrating experience, and if this is not the case, then the fault must be laid at the door of our clinical faculties. Upon them and upon their pedagogical practices must ultimately rest the burden of integration of nutrition, microbiology, anatomy, biochemistry, physiology, pharmacology, and the social sciences.

Faculty Responsibilities

In nursing we support the principle that the faculty of the school should be responsible for the guidance, instruction, supervision, and evaluation of students assigned for clinical and field practices. Yet all schools are not able to teach tuberculosis and respiratory diseases and long-term illness. Other areas which need to be taught by the school's own teachers are team management and public health nursing.

Psychiatric nursing is a part of the professional curriculum; preparation in psychiatric nursing is expected of the diploma and baccalaureate-degree graduate. Yet how many schools of nursing have qualified teachers with time to help the student develop an awareness and understanding of the emotional aspects of the nursing care of the patient? How many schools offer the opportunity to the student to explore the dynamics of nurse-patient relationships and group interaction? How many emphasize the importance of the nurse's self-awareness in dealing with modifications of behavior?

Conclusion

The solution of the problems facing schools of nursing calls for effective national and state leadership. Outstanding progress has been made through the National League for Nursing's accreditation program. In that organization, the nursing profession, hospitals, and colleges with nursing schools voluntarily set the standards of education. This program is developed to the point where a nursing school is accredited if it is found to be doing what it is equipped to do.

Nursing now is in a place of primary importance in the field of human endeavors. Its resources are being estimated, its systems of education are being reviewed, the possibility of new developments in nursing education are being explored. Given a little time and effective leadership, I am sure schools of nursing will not only catch up but keep up and provide the finest possible type of nursing education – the type this country must have.

Interview

(*continued from page 21*)

cancer are being cared for at home. Doesn't this place the public health nurse in a more responsible role?

A. Definitely. The public health nurse has an increasingly responsible role today. She has to be thoroughly aware of the method of treatment used for each patient's condition, so that she can carry out the doctor's orders and be able to interpret his orders for the patient; she must be a morale-builder for the patient and the family, and she must teach the family to care for the patient.

Furthermore, if the patient is receiving a radioactive isotope, the nurse must be able to advise him about the disposal of wastes and care of himself while this treatment is going on. Lastly, her responsibility does not end until she has helped him and his family to move to that point of rehabilitation where the patient and the family have developed some degree of acceptance of his cancer and the treatment he is receiving.

Q. Miss Nelson, before we close this discussion on radiation, what about the fall-out from testing atomic bombs that everyone seems so concerned about? Do you think all the fuss and fury being made over it is warranted?

A. The isotope in the fall-out is strontium^{90}, which is formed in the air as the atomic bomb is exploded. The chemical substance then falls to the ground and gets on the grass, mostly in our midwestern states. The cows eat the grass and also swallow the strontium^{90} which, when in the body, acts like calcium. So you see, it goes into the cow's milk and then finds its way into our homes. We drink the milk and in doing so swallow a certain amount of the radioactive isotope.

Actually, there is more fuss being made over it than is warranted. It is true that we swallow the radioactive substance, which then goes to our bones, but extensive research is now showing that the total amount anyone in the United States has received to date is not harmful. Another interesting fact is that babies have been found to have 10 times as much strontium^{90} in their bodies as do adults, and yet even this larger amount is much too small to be of any great concern at this time.

Q. In summary, then, would you say that well-informed nurses will be of great assistance to patients and to medical personnel as we go into this atomic era?

A. I can't stress enough that there are principles governing the practice of nursing with these radioactive products and the professional nurse has a personal and a professional responsibility to keep herself informed about them.

Q. Well, we have covered quite a large area. Now, can we summarize by giving perhaps five or 10 basic rules for nurses to use when planning the nursing care of patients receiving radioactive isotopes?

A. That is a good idea, and I might cite for you 10 basic rules I use in thinking about the nursing care of these patients:

1. Check the patient's chart to find out what radioisotope is being given, what the dosage is, and when the treatment was started.
2. Determine to what extent the patient knows and understands what is going on. Teach him proper handling of himself and/or his excreta, if necessary.
3. Arrange for special disposal and handling of contaminated materials, if necessary. This includes linens, dressings, etc., which may become contaminated when certain isotopes are used.
4. Employ the necessary measures to assure adequate but speedy patient care during the time the patient is emitting gamma radiation.
5. Wash hands with soap and water after giving care to a patient who has had a radioisotope.
6. Refrain from touching your fingers to your face or mouth while caring for a patient who has had a radioisotope.
7. If the patient dies after a radioisotope has been administered, place a tag on his body, giving information concerning the kind of isotope used, the dose, and the date of administration.
8. If the patient has a radium implant which gets dislodged, use a long-handled forceps to place it in a lead-lined carrier; never touch it with your hands. Notify the doctor immediately that the radium has slipped out of place in the body.
9. If the patient has received radioactive gold which seeps from the site of injection, inform the doctor immediately. If it necessary to remove the dressings, use a long-handled forceps and place the dressings in a lead-lined container. Never touch them with your hands.
10. After the decay rate of the isotope has progressed to a point where precautions are not indicated, these safety measures should be discontinued.

I am sure that if the nurse follows these simple rules she will be practicing much more effective nursing, with a great deal more safety to herself and her patient.

Advances and Trends . . .

(*continued from page 26*)

not mobilize sufficient digitalis to account for the postdiuretic intoxication phenomena.

Thus a mechanism other than digitalis mobilization must operate to change myocardial sensitivity; clinical features of this phenomenon suggest another explanation. Patients who exhibit such postmercurial difficulties invariably have advanced congestive failure, and they have been maintained on rigid salt restriction. Usually they are receiving ammonium chloride to improve response to mercurials. These are the patients likely to excrete substantial quantities of potassium when given diuretics. Perhaps the heart's threshold to the toxic properties of digitalis is reduced by potassium depletion, as is true with isolated heart preparations.

If potassium loss is responsible for the toxicity, potassium administration should abolish it. Such is the case: After the ingestion of potassium chloride the first effects are noted within 30 minutes. Peak action occurs in one to three hours, at the time when the highest serum level is achieved. Dissipation of effect follows within four to eight hours.

The postmercurial redigitalization phenomenon may be described as a state of increased myocardial sensitivity to the toxic properties of digitalis, resulting from a negative potassium balance precipitated by diuretic therapy. In this case digitalis must be discontinued and potassium administered by mouth until evidence of overdosage disappears. Serious disturbances of rhythm and even death will be prevented if diuretics are withheld when the patient gives any evidence of digitalis intoxication.

Bibliography

Levine, S., and Lown, B., *Current Concepts in Digitalis Therapy*. Boston, Little, Brown and Company, 1954.

Master, A. M., "Digitoxin Intoxication." *Journal of the American Medical Association*, Vol. 137 (1948), pp. 531-34.

Moody, R. W., "Maintenance Dose and Toxicity of Digitoxin." *Annual of Internal Medicine*, Vol. 24 (1951), pp. 1349-57.

Squires, *et al.*, "Distribution of Body Fluids in Congestive Heart Failure." *Circulation*, Vol. 4 (1951), pp. 697-705.

Schwartz, *et al.*, "Observations on Electrolyte Balance During Mercurial Diuresis in Congestive Heart Failure." *Journal of Clinical Investigation*, Vol. 29 (1950), p. 844.

What They're Saying

(continued from page 8)

body. He is even deprived of control over his use of time because of the administrative scheduling of activities, and is denied access to knowledge about himself . . ." According to the article, the patient "reverts emotionally to the status of a baby." Furthermore, his weakened ego results in a growing bitterness toward hospitals.

Considered one of the most damaging psychological forces on the patient is this loss of identity as a human being. In some institutions the sick are identified only by the numbers of their rooms or the nature of their illnesses. When an investigator asked an attendant in a chronic-disease hospital whether a certain patient was ambulatory, she had to locate the name card on the bed before she knew to whom he was referring.

The *Look* article criticizes the attitude of professionals toward children as well as adults. The investigating team discovered that except for a few hospitals where there are special pediatric sections permitting parents to help take care of their children, most institutions have limited visiting hours. Pediatrician Dr. O. A. Faust explains: "No amount of love and understanding will make up for the absence of the mother. When doctors realize how inextricably the emotional welfare is bound up with physical welfare, provisions will be made for a parent to stay with the hospitalized child . . ."

The investigators concluded that stressing staff convenience rather than patient benefit results from unsatisfactory hospital organization. The administrator, who is supposedly in charge, has many groups with which to contend. The board of trustees (usually laymen) handles business and financial problems; the medical board—consisting of physicians—establishes and enforces medical policies. Besides the nursing staff, there is also the housekeeping department.

Frequently, friction exists among the various groups, making it difficult for the administrator to enforce discipline. According to the report, in most instances the members of the medical board are responsible for the collapse in authority. "This may be due to the average physician's reluctance to submit to discipline. Usually he regards himself as a free and independent individual not bound by ordinary rule," states the *Look* article. "In such an atmosphere of disharmony and lack of authority, the hospital cannot properly care for the patient. Too concerned with their own problems and dissatisfactions, the members of the staff lose sight of the patient's emotional needs."

Following their inquiry, the investigators of the California Medical Association drew up a patients' "Bill of Rights" to promote better hospital conditions. It was suggested that after admission to a hospital, the patient should not have to undress immediately unless bed rest is ordered. His clothes should be kept in a near-by locker or closet, accessible to him if he is permitted to be dressed. If bed clothes are required, he should be allowed to use his own. He should be allowed to keep personal effects, including money. Above all, his feeling of identity must be respected. Unless it is considered inadvisable, the patient should be informed of his progress to the extent of permitting him to chart his own temperature, weight, etc., thus enabling him to participate in his own treatment. Improved eating, waking, washing, and sleeping regimes were advised. "Sleeping hours should approximate sleeping time of adults on the outside rather than the bedtime of small children," stated the report.

The investigating team made the following recommendations to alter and improve hospital standards:

► Experts from the fields of psychiatry, psychology, hospital administration, sociology, anthropology, and law should be appointed to a board of review to evaluate the present findings. From the study, they may be able to suggest changes in hospital organization.

► A standard of conduct should be provided for physicians that will permit them to feel no reluctance in exposing the substandard conduct of colleagues.

► County medical societies should organize committees on hospital practice which would enable capable doctors to serve as observers in all hospitals in the county during the course of each year.

► Support should be given to medical schools in their research programs investigating patient reactions in hospitals. Because physicians and nurses lack ability in handling the emotional responses of patients, teaching programs of this nature should be improved during their training period.

► Support should be given to experimental programs for revising conventional hospital organization.

The *Look* article concludes by emphasizing that changes in hospital conditions can result only through the revolt of patients. As the California Medical Association report pointed out, ". . . every patient bears responsibility for seeing that he gets good health care by means of thoroughly unsubmissive and firm demands upon the medical personnel who are paid by him to provide for these very needs."

CLASSIFIED ADVERTISING

20 cents per word, minimum charge $6.00. Capitals or bold face, $2 per line extra. Lines of white space, $2 per line extra. Telephone orders not accepted. No agency commission allowed. Closing date for advertisements: 15th of 2nd month preceding publication date. Advertisements which arrive too late for insertion in one issue will automatically go into the next issue unless accompanied by instructions to the contrary. The publishers reserve the right to refuse or withdraw any advertising, at their discretion, without advance notice. Send ads with remittance to: Classified Ads, Nursing World, 480 Lexington Ave., New York 17, N. Y.

PSYCHIATRIC NURSING: Clinical Instructor in a fully accredited private hospital near Baltimore, Md. Give academic and experience background when applying to Theresa G. Muller, Director of Nurses, The Sheppard & Enoch Pratt Hospital, Towson 4, Md.

INSTRUCTOR — CLINICAL, EVENINGS & NIGHTS: Should have B.S. degree in nursing education and minimum of two years' experience in two of the following positions: instructor, assistant instructor, head nurse. 400-bed private general hospital with expansion program to be completed in fall 1958. 150-student school of nursing, three-year diploma course. Contact Personnel Department, Milwaukee Hospital, 2200 West Kilbourn Ave., Milwaukee 3, Wis.

NURSING ARTS INSTRUCTOR OR ASSISTANT: To assist with teaching of Nursing Arts shared with three instructors. N.L.N. fully accredited diploma program with university affiliation for basic sciences. 160 students. Excellent personnel policies, pleasant working conditions in 576-bed hospital, JCAH accredited. Newly furnished apartment nearby at reasonable rent, if desired. Please write Personnel Director, St. Luke's Hospital, Duluth 11, Minn.

PSYCHIATRIC NURSING: Instructor (Male) for attendant program in a fully accredited private hospital near Baltimore, Md. Give academic and experience background when applying to Theresa G. Muller, Director of Nurses, The Sheppard & Enoch Pratt Hospital, Towson 4, Md.

WORK OVERSEAS: Nurses and technicians are needed by American companies with overseas projects. Booklet tells how and where. Price $1. Satisfaction guaranteed. Free booklet on retirement in economical Mexico with each order. Publisher Rathe, Box 2013, Pasadena, Calif.

ASSISTANT DIRECTOR OF NURSING SERVICE: Also R.N.'s for GENERAL DUTY. 65-bed JCAH Hospital connected with co-ed college of 1500 students. Apply Administrator, Berea College Hospital, Inc., Berea, Ky.

PSYCHIATRIC NURSING: Supervisory and Staff Nurses (Men and Women) in a fully accredited private hospital near Baltimore, Md. Give academic and experience background when applying to Theresa G. Muller, Director of Nurses, The Sheppard & Enoch Pratt Hospital, Towson 4, Md.

PSYCHIATRIC NURSING: Assistant Director of Education in a fully accredited private hospital near Baltimore, Md. Give academic and experience background when applying to Theresa G. Muller, Director of Nurses, The Sheppard & Enoch Pratt Hospital, Towson 4, Md.

BARNES HOSPITAL: Offers to graduates of accredited schools of nursing a comprehensive course in anesthesia, embracing administration of nitrous oxide, ethylene, cyclopropane, ether, barbiturates, etc. Modern techniques taught include face-mask, endotracheal, intravenous, rectal, etc. Write to Mrs. Dean Eberhardt Hayden, Director, School of Anesthesia, Barnes Hospital, St. Louis 10, Mo.

NURSES: Supervisory, O.R., and General Duty. Accredited General Hospital in suburbs of Washington, D.C. New air-conditioned wing, piped-in oxygen, nurse-patient intercom. Forty-hour week, merit increases. Near-by universities for continued education. Director of Nursing, Suburban Hospital, Bethesda, Md.

GRADUATE NURSES: For General Duty, 70-bed general hospital, new, air-conditioned, well equipped. $325 per month starting salary plus meals, laundry of uniforms, vacation, sick leave. Transportation paid to Dumas. Write, call, wire collect. Administrator, Memorial Hospital, Dumas, Texas.

Check these

SAUNDERS BOOKS

for your professional library!

Davis and Warren— UROLOGY AND UROLOGICAL NURSING

New (6th) Edition! Every aspect of the nurse's duty in urological cases is covered in this brief, practical text. The authors thoroughly explain details of pre- and postoperative care plus the function and maintenance of urological equipment. All specialized urological procedures are discussed with emphasis on their application in bedside nursing.

For this *New (6th) Edition* therapy has been brought up to date to include discussions of many newer drugs used in urology. There are new discussions on *urinary diversion, radical prostatectomy,* and *mental therapy in urologic disease.* Revised and expanded references follow each chapter.

By DAVID M. DAVIS, M.D., Professor Emeritus of Urology, Jefferson Medical College, and Visiting Lecturer in Urology, Graduate School of Medicine, University of Pennsylvania; and KENNETH C. WARREN, M.D., Assistant in Urology, Jefferson College, Assistant Urologist, Bryn Mawr Hospital. About 188 pages, illustrated. About $3.75.

New (6th) Edition—Just Ready!

Montag and Swensen FUNDAMENTALS IN NURSING CARE

New (3rd) Edition! Stressing nursing principles, this practical text points out *total care* for *all* patients —regardless of diagnosis, degree of illness or age. The authors clearly show the nurse's responsibility in contributing to both her patient's physical and mental comfort.

This is a complete revision. A new chapter covers *surgical dressings.* Chapters on *medical asepsis* and *discharge of the patient* are rewritten. Over 30 new discussions include: opportunities in nursing—diabetes mellitus — fluoridation — care of thermometers—patient's history—radioactive iodine—rehabilitation—orientation of the patient. Fifty new illustrations have been incorporated.

By MILDRED L. MONTAG, Ed.D., R.N., Professor of Nursing Education, Teachers College, Columbia University; and RUTH STEWART SWENSON, M.A., R.N., Director, Associate Degree Program in Nursing, Weber College, Ogden, Utah. *(Formerly Montag and Filson's Nursing Arts.)* About 581 pages, 148 illustrations. About $5.25.

New (3rd) Edition—Just Ready!

Jamieson, Sewall and Gjertson— TRENDS IN NURSING HISTORY

New (5th) Edition! Emphasis in this thoroughly revised text is placed on general trends of nursing events throughout the ages. It shows the social, political and religious backgrounds which influenced or were influenced by this profession. A brand new chapter, "Modern Nursing Careers", covers: *career opportunities open to the nurse—her moral and legal responsibilities—provisions for her economic security—and sources of educational funds for advanced study.* New discussions include: *Hinduism—Reincarnation—Vocational Rehabilitation—Nursing Research—and Nursing in Foreign Countries.* The illustrations have been completely revamped; 50 new ones added.

By the late ELIZABETH MARION JAMIESON, B.A., R.N.; MARY SEWALL, B.S., R.N., formerly Director of Nursing Education, Methodist Hospital of Southern California, Los Angeles; and LUCILLE S. GJERTSON, R.N., M.A., Science Instructor, Saint Francis Memorial Hospital School of Nursing, San Francisco. About 522 pages, 155 illustrations. About $5.00.

New (5th) Edition—Just Ready!

Hansen—STUDY GUIDE AND REVIEW OF PRACTICAL NURSING

Second Edition! This unique book reviews and discusses in outline form virtually every problem to confront the practical nurse—ranging from the simplest method of taking oral temperature to emergency measures in stemming massive hemorrhage. Particular attention is focused on her role in patient rehabilitation. Here are hundreds of questions, typical of situations you meet in everyday practice. You will find valuable data on such topics as: *structure and function of the body, normal nutrition, microorganisms, community health, aids to diagnosis and treatment, meeting common emergencies, mental illness, etc.* Important safety measures are included. Handy cross references and illustrations further illuminate the text.

By HELEN F. HANSEN, R.N., M.A., formerly Executive Secretary, Board of Nurse Examiners, Department of Vocational and Professional Standards, California. 398 pages, illustrated. $4.25.

Second Edition!

Clip and Mail Coupon Today!

NW 4-59

W. B. SAUNDERS COMPANY

West Washington Square
Philadelphia 5, Pa.

Please send me the following books:

- ☐ Remittance Enclosed ☐ C.O.D.
- ☐ Davis & Warren's Urological Nursing. About $3.75. (Send C.O.D. when ready.)
- ☐ Montag & Swenson's Nursing Care. About $5.25. (Send C.O.D. when ready.)
- ☐ Jamieson, Sewall & Gjertson's Nursing History. About $5.00. (Send C.O.D. when ready.)
- ☐ Hansen's Study Guide & Review of Practical Nursing. $4.25.

Name .....

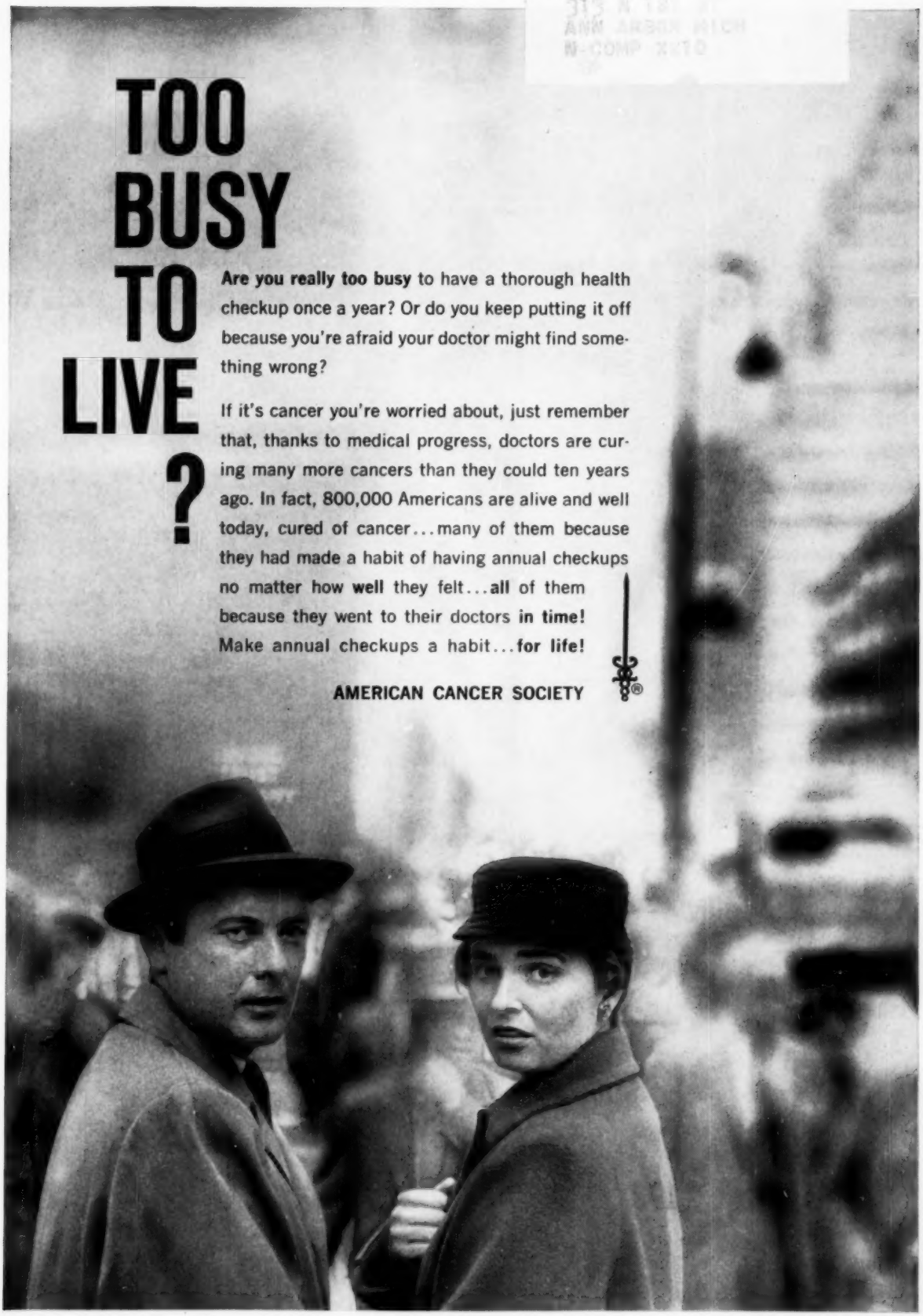
Address .....

..... Zone.....

UNIVERSITY MICROFILMS
313 N 1st St
ANN ARBOR MICH
N-COMP X210

TOO BUSY TO LIVE?

Are you really too busy to have a thorough health checkup once a year? Or do you keep putting it off because you're afraid your doctor might find something wrong?

If it's cancer you're worried about, just remember that, thanks to medical progress, doctors are curing many more cancers than they could ten years ago. In fact, 800,000 Americans are alive and well today, cured of cancer... many of them because they had made a habit of having annual checkups no matter how **well** they felt... **all** of them because they went to their doctors **in time!** Make annual checkups a habit... **for life!**

AMERICAN CANCER SOCIETY